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FINAL ENVIRONMENTAL IMPACT STATEMENT

Beaverhead National Forest

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ENVIRONMENTAL IMPACT STATEMENT
for
THE BEAVERHEAD NATIONAL FOREST
LAND AND RESOURCE MANAGEMENT PLAN

VOLUME II

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APPENDIX C

INTRODUCTION

The Forest had already begun to develop a Final Forest Plan and EIS when, in September 1983, the NFMA regulations were amended to require each Forest to prepare, using specific criteria, an inventory of roadless lands and to evaluate each of these areas for wilderness in its land and resource planning process. The Forest's planning process had, until that time, assumed that RARE II would resolve wilderness designation of the inventoried roadless lands and that the Montana Wilderness Study Act and the Lee Metcalf Wilderness Bill would resolve the wilderness questions in the West Pioneer and Taylor-Hilgard (Madison) areas, respectively. Thus, wilderness had not been included in the 1982 DEIS as a public issue. In order to address the revised NFMA regulations, the Forest decided to add a seventh issue addressing wilderness and to incorporate an analysis and re-evaluation of the inventoried roadless lands in the planning process. This Appendix discloses the results of that analysis.

Most of the roadless lands on the Beaverhead Forest have never been developed because it has not been economically desirable to do so. In many instances, these areas are composed of a mix of productive forest lands and lands not capable of producing commercial timber. The relationship of the productive land to the unproductive, the location of commercial quality timber stands on steep or rugged terrain or in isolated pockets, the lack of economically mature timber on productive land, or a combination of these factors contribute to reasons for the lack of development in many areas. Most people agree that the remaining undeveloped areas have a nonpriced value as a "roadless resource"; however, few people agree on the magnitude of that value or how it can be assessed.

Forest planning, as required by NFMA, formulates administrative decisions on long-term use of nonwilderness National Forest lands. If the Forest Service decision is that wilderness is the best use, then that decision becomes a recommendation to Congress for making that land use classification. Economics, technology, timber stands, and human needs all change over time. Forest planning attempts to deal with change by making projections of timber growth and mortality, timber values and production costs, recreational use trends, and so on, using the best information available. This Appendix describes each roadless area, the resources and values considered, the range of alternative land uses studied, and the effects of management under the alternatives. Multiple use land management prescriptions are grouped, on the basis of the effects they may have on the roadless resource, into five management emphases: (1) Wilderness; (2) Timber (Modification/Maximum Modification and Retention/Partial Retention VQO); (3) Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife); (4) Primitive and Semi-Primitive Recreation/Custodial; and (5) High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber). (A listing of the prescriptions that make up each management emphasis grouping and a brief description of each prescription begins on page 607 of this Appendix.) Significant effects of alternative assignments for each roadless area are summarized, by management emphasis, in the following narratives.

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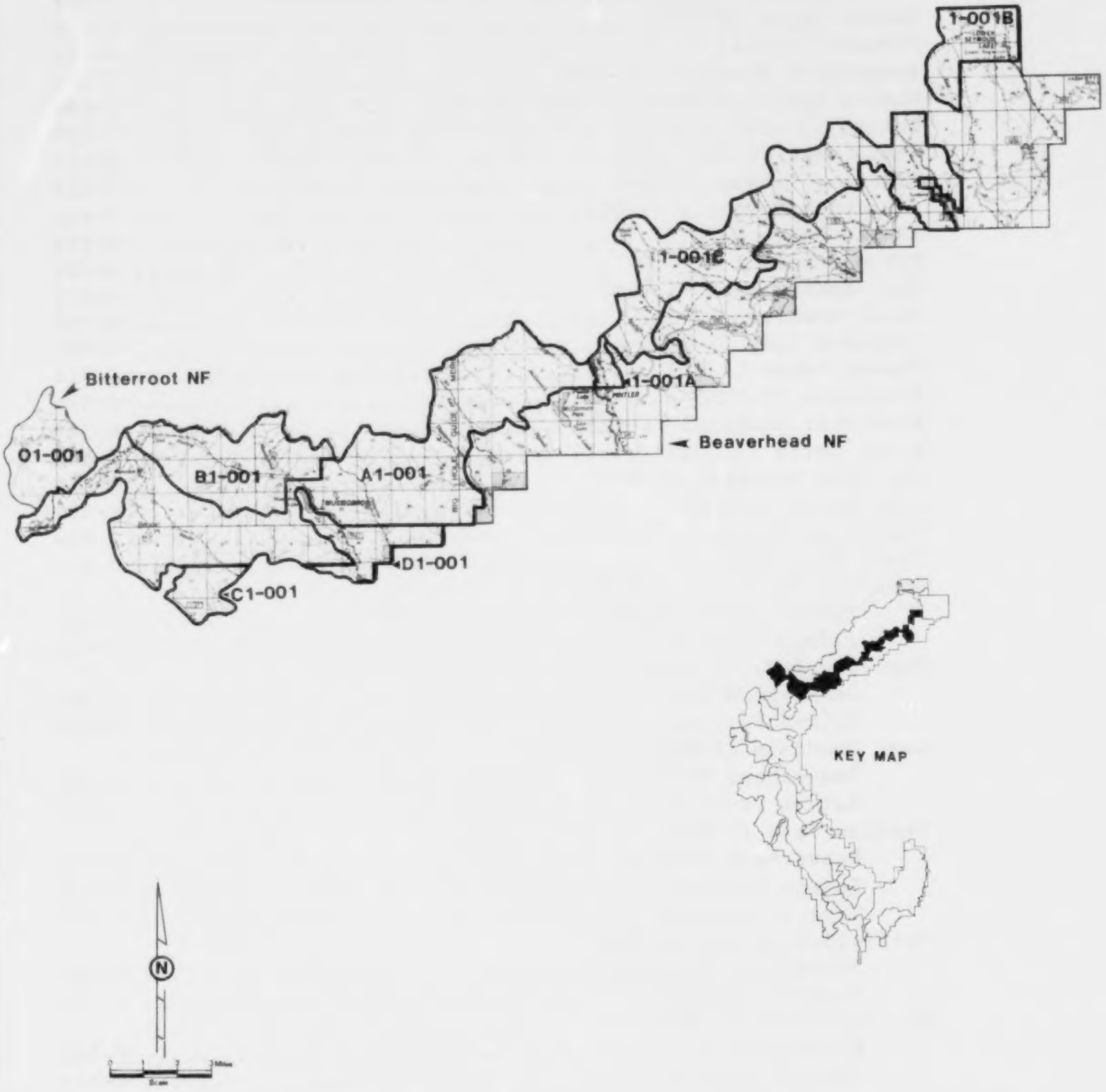
ROADLESS AREA 1-001

NORTH BIG HOLE


1-001B
LOWER SEYMOUR LAKE
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Bitterroot NF
Beaverhead NF
O1-001
B1-001
A1-001
D1-001
C1-001
KEY MAP
N
Miles
Scale

WEST BIG HOLE PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: North Big Hole (1-001)	Gross Acres	Net Acres
1-001A	715	715
1-001B	3,217	3,217
1-001C	14,372	14,372
A1-001	24,332	24,332
B1-001	6,571	6,571
C1-001	1,521	1,521
D1-001	2,470	2,370
Total	53,198	53,098
Bitterroot NF	3,691	3,691

I. DESCRIPTION

The Beaverhead and Bitterroot Forests share the North Big Hole Roadless Area with the Bitterroot having about seven percent of the area. The units in this roadless area lie in the northwest portion of the Big Hole Planning Unit, primarily bordering the Anaconda-Pintler along the southern and southeastern edges. The portion of area 1-001 administered by the Bitterroot National Forest lies on the extreme southern boundary of the Anaconda-Pintler Wilderness Area and adjacent along the Continental Divide to the Beaverhead A1-001 unit. On the Beaverhead, the North Big Hole Roadless Area extends from Seymour Creek in 1-001B to Johnson Creek, bordering area C1-001.

Area 1-001A is located centrally in 1-001 from Pintler Creek on the west and bordered by Area A1-001, extending as far as the east edge of Section 11, R15W, T1N and terminating at Area 1-001C. The Anaconda-Pintler Wilderness forms the northern boundary, and on the south are developed forest lands. The area is accessible from Montana State Highway #43 via Forest roads #1203 and #185. At Pintler Creek, Area 1-001A also defines the western edge of the Wise River Ranger District.

Area 1-001B shares the northeastern edge of the Beaverhead National Forest boundary with the Anaconda-Pintler Wilderness on the north. Area 1-001B is accessible from Forest road #934 off Montana State Highway #274. Developed forest lands reach approximately four miles south to the Forest boundary. Major drainages are Seymour Creek, Chub Creek, and East Fork La Marche Creek.

Area 1-001C occupies a larger area between 1-001A and 1-001B, bordered on the northern edge by the Anaconda-Pintler Wilderness and on the south by developed Forest lands, within two to three miles from the southern Forest boundary. LaMarche Creek drains through the eastern end of 1-001C; Mudd Creek through the west sections. Other drainages include the Middle Fork Fishtrap and Swamp Creek. This area is accessed by Forest roads #1223, #1203 and #935 from State Highway #43.

The Anaconda-Pintler Wilderness and area B1-001 form the northern boundary of Area A1-001. It is almost divided by developments around Mussigbrod Lake; the north edge of C1-001 borders the area at Sections 10 and 11, R17W, T1S.

Forest road #1245 edges the west end of A1-001 near Bender Point and a narrow arm approximately one-half mile wide and four miles long extends west from the area at the Continental Divide. Forest roads #1245, #5732, and #185 also provide access to A1-001. Drainages flowing through the area are Bender, Plimpton, Thompson, Howell and Pintler Creeks. Campgrounds and public access are provided at Bender, Thompson and Johnson Creeks. Glacial troughs in this area are very narrow and rocky.

Area B1-001 is a more remote one situated between the Anaconda-Pintler Wilderness on the north and by A1-001 on the south. It is accessed by trails #372 and #379 from Mussigbrod Lake and from trail #110 along the Continental Divide from Forest road #1137. Hellroaring Creek and Mussigbrod Creek drain through the area. Sections of this area have been strongly glaciated and contain steep, rugged peaks, high rocky cirque basins, and deep U-shaped glacial troughs. Area B1-001 is also characterized by light forest containing open ridges and terrain. Outstanding scenic features include rock spires, historic rifle pits and unconfirmed but assumed teepee rings.

Area C1-001 reaches southward from A1-001 at Sections 1 and 11, R17W, T1S as far as Johnson Creek and Forest road #1137 at its southwest margin. The boundary on the southeast excludes Forest road #1203.1. The only major drainage, Bender Creek, flows northward to the Big Hole River through this roadless area.

Area D1-001 is completely surrounded on its north by area A1-001 and the Forest boundary edges its south side at Sections 2, 3, and 10 of R16W, T1S. The main feature of the area is the 102-acre Mussigbrod Lake, which is accessed by Forest roads #5732 or #185.

The Bitterroot portion is bordered on the east by the Anaconda-Pintler Wilderness, on the south by A1-001,and the remainder by roads and areas of timber harvest.

These roadless areas are comprised of the gentle to moderately steep foothills of the Anaconda Range. Deep U-shaped glacial trough valleys cut across the unit at Plimpton, Mussigbrod, Thompson, Howell and Pintler Creeks which flow southeast to the Big Hole River. Other major drainages are Seymour, LaMarche, Mudd, Bender and Johnson Creeks. Some of these canyons are very narrow and rocky. Well-defined terminal glacial moraines fan out at the mouths of each of these valleys. Elevations vary only moderately from 6300 to 8800 feet. Average annual precipitation is 25-30 inches, 70 percent of which occurs as snow.

Soils in the upper elevational portion of the areas are shallow, weakly developed, coarse loamy sands. Soils in the moraines are stony, sandy loams. Parent materials in this area are granitic rocks. Soils on the unglaciated gentle ridges are deep and moderately deep loams and fine sandy loams.

Vegetative cover is predominantly forest with subalpine fir, grouse whortleberry, lodgepole pine, and some Douglas-fir and spruce types. Valley bottoms contain willow and wet meadow at lower elevations and grade into aspen and Engelmann spruce at higher elevations.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

As a whole, the North Big Hole Roadless Area has retained much of its natural appearance. Man's influence is evident primarily through range developments, jeep and foot trails, limited campground facilities, and simple bridges. These impacts are relatively localized and, in most cases, are screened by the broken topography and vegetation in the area.

The Northside road intrudes into area A1-001 from Pintler Creek to Clam Valley; however this road is presently closed as it crosses the East Fork of Thompson Creek. There is a gravel road leading to the Seymour Campground in area 1-001B. A road into Swamp Creek (area 1-001C) leads to a timber unit which is scheduled to be cut in June 1984. This cutting unit is located in Sections 13 and 14, T2N, R14W and contains approximately 37 acres.

There are end-of-road horse facilities on Pintler and Seymour Creeks and an unimproved camping area on Pintler Lake.

The Bitterroot portion of 1-001 is still quite natural appearing and the natural integrity of the area would be rated high.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude are provided by the broken topography, vegetative screening, and relatively light use of portions of this area. These opportunities are fewer near the campgrounds and trails but become more prevalent as one moves toward the wilderness boundary. Some parts of the area are nonforested or only lightly forested and contain open terrain that is used by motorized vehicles, thereby impacting solitude opportunities. Summer motorbike use and winter snowmobiling also impact these opportunities. Areas 1-001B and 1-001C provide relatively few opportunities for solitude because of the traffic in/adjacent to the roadless areas, and other management activities, such as logging, that occur near the units.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities provided by this roadless area are those associated with hiking, camping, and nonmotorized fishing and hunting. These opportunities are enhanced/impacted by conditions and activities mentioned above. Primitive recreation opportunities are also enhanced by the nearness of the roadless area to the Anaconda-Pintler Wilderness.

D. OTHER FEATURES

Freshwater clams are found in some streams in the roadless area.

E. WILDERNESS MANAGEABILITY

Areas A1-001 through D1-001, 1-001A through 1-001C, and the Bitterroot portion are adjacent to the Anaconda-Pintler Wilderness. Some boundary adjustments with respect to this wilderness would make the area more manageable. The jeep trail to Mudd Lake in 1-001C is obscure and could be included without deleting from the area. 1-001B is a small area (3,217 acres) whose size could become a factor should it be decreased in size;

however, it contains wilderness characteristics sufficient to be included with the neighboring Anaconda-Pintler Wilderness. Essentially, inclusion of these areas in a wilderness classification would serve as a buffer to the Anaconda-Pintler Wilderness since they have little to offer independently. The addition of the Bitterroot portion would not contribute significantly to the current wilderness, since the boundary is presently very manageable as it exists.

Beaverhead NF

1977 Inventory Acres:	38,300 gross	37,810 net
1983 Inventory Acres:	53,198	53,098
Change	+ 14,888	+ 15,278

Reasons for change in inventoried acres:

F.Y. 1984 Timber Sale and roads	- 3,972	- 3,972
Existing Timber Sale & roads	- 5,356	- 5,356
Addition of Unit Plan roadless	+ 23,719	+ 23,719
Acreage Recalculation	+ 507	+ 897

Bitterroot NF

1977 Inventory Acres:	3,800	3,800
1983 Inventory Acres:	3,691	3,691
Change	- 109	- 109

Reasons for change in inventoried acres:

Existing Timber Sale & roads	- 480	- 480
Acreage Recalculation	+ 371	+ 371

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-001A VALUE	1-001B VALUE	1-001C VALUE	A1-001 VALUE	B1-001 VALUE	C1-001 VALUE	D1-001 VALUE	1-001 Bitterrt.	COMBINED VALUE
Acres										
Gross	Acres	715	3217	14,372	24,332	6571	1521	2470	3691	56,889
Net		715	3217	14,372	24,332	6571	1521	2370	3691	56,789
Recreation										
Primitive	RVD's	9	41	182	95	83	5	30	0	445
SPNM	RVD's	13	59	265	134	121	8	44	200	844
SPM	RVD's	13	58	262	142	120	9	43	0	647
Range										
Existing obligated suitable	Acres	44	226	3680	2314	60	192	1611	180	8307
Allotments	# of	1	0	3	5	1	1	2	1	8*
AUM's	AUM's	17	0	1005	639	53	177	605	15	2511
Existing vacant suitable	Acres	0	0	0	0	0	0	0	0	0
Allotments	# of	0	0	0	0	0	0	0	0	0
Timber										
Tentative suitable	Acres	702	2879	13,321	18,760	3850	1303	1546	2470	44,831
Standing Volume	MBF	3183	14,190	76,431	107,991	21,611	7295	8963	19,500	259,164
Corridors										
Existing/Potential	# of	0	0	0	0	0	0	0	0	0
Wildlife T&E										
Bald Eagle	Acres	0	0	0	0	0	0	0	0	0
Big Game										
Winter Habitat	Acres	197	0	1699	3199	177	447	1554	0	7273
Elk										
Winter Habitat	Acres	0	0	0	243	0	0	77	0	320
Deer										
Winter Habitat	Acres	0	0	0	0	0	0	0	0	0
Significant Fisheries										
Stream Miles	Miles	.4	5.7	16.3	31.0	9.5	1.5	4.9	1	70.3
Stream Habitat	Acres	.9	2.4	19.6	14.7	1.6	3.3	7.7	1.5	51.7
Lakes	# of	0	4	17	16	5	3	16	0	61
Lake Habitat	Acres	0	21	33	47	10	7	134	0	252
Water Developments										
Existing	# of	0	0	0	1	0	0	1	0	2
Minerals										
Very High	Acres	0	0	0	0	0	0	0	0	0
High	Acres	0	3217	0	0	0	0	0	0	3217
Moderate	Acres	715	0	14,372	24,332	6571	1521	2370	3691	53,572
Low	Acres	0	0	0	0	0	0	0	0	0
Claims	# of	0	0	0	0	0	0	0	0	0
Oil and Gas Potential										
Very High	Acres	0	0	0	0	0	0	0	0	0
High	Acres	0	0	0	0	0	0	0	0	0
Moderate	Acres	715	3217	14,372	24,332	6571	1521	2370	3691	56,789
Low	Acres	0	0	0	0	0	0	0	0	0
Oil and Gas Leases										
Leased area	Acres	715	3127	9652	16,800	260	781	520	1100	32,955

* Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of areas.

1. Recreation

Area 1-001A has no developed recreational facilities; however, Pintler Creek campground is located a short distance to the north. Visitors use Forest road #185 and trail #37 through 1-001A as access to the scenic Pintler Falls located in the Anaconda-Pintler Wilderness.

Area 1-001B--activities in this region include camping, plant identification, bird watching, and hunting and fishing; with one improved campground on Seymour Creek, and an end-of-road horse facility. Seymour Lake, with a surface area of 15 acres, is a popular recreation site in 1-001B. Trail #131 that provides access to Upper Seymour Lake and the Anaconda-Pintler Wilderness is closed year-long to motorized vehicles for erosion control and safety.

Area 1-001C--recreational opportunities in this region are limited to those provided by primitive settings. Spectacular vista points and scenic views are common.

Area A1-001 includes two developed recreational sites--a four-table campground at Mussigbrod Lake and an unimproved campground at Pintler Creek. Dispersed recreational opportunities are numerous. Vehicle use occurs at lower elevations. Trailheads at Mussigbrod and Pintler campgrounds lead to the Anaconda-Pintler Wilderness. A1-001 is also popular for hunting and fishing; one outfitter is authorized to use this area.

Area B1-001 recreational opportunities are limited to those provided by primitive settings.

Area C1-001 provides no campgrounds or other developed sites, but dispersed recreational activities such as firewood cutting are significant here.

Area D1-001 has numerous dispersed recreational activities at the 102-acre Mussigbrod Lake. Vehicle use occurs at lower elevations, especially on Forest road #5732 which is heavily used as access to Mussigbrod Lake and Forest trail #372.

The Bitterroot portion offers recreation opportunities that are limited to those provided by primitive settings.

2. Wildlife

Area 1-001A--summer forage provides cover for bear, deer, elk, moose, and other furbearers common to western Montana. Major streams support brook and cutthroat trout. Tributaries to the Big Hole River are important spawning areas, including spawning habitat for brook and cutthroat trout and grayling from the Big Hole River.

Area 1-001B is inhabited by mountain goats in the more rugged terrain along the Continental Divide, with very little suitable elk or deer winter range, but with a significant elk summer range. Major streams provide spawning grounds for the Big Hole River fishery.

Area 1-001C--populations of Rocky Mountain goats use a salt lick along the west fork of Fishtrap Creek and there is also a blue heron rockery at the pond in this same vicinity. The area is considered to be important elk summer range. Major streams of the area are inhabited by brook and cutthroat trout. Tributaries to the Big Hole River are important spawning areas.

Area A1-001 provides summer forage and cover throughout for deer, elk and moose. The wildlife habitats include moose winter range, elk calving and rutting areas, limited elk winter range, elk wallows, cliffs, and riparian zones, and a unique area of glacial deposits and water-filled potholes. Most elk and deer migrate to the Bitterroot Valley and Fleecer range in early winter. The larger streams sustain mainly brook trout, although some cutthroat and rainbow trout are present. Arctic grayling are common in Mussigbrod Creek and freshwater clams inhabit most streams of the area (Clam Valley). Numerous beaver dams are constructed along meandering, willow-lined streams.

Area B1-001 is inhabited by mountain goats in the more rugged terrain along the Continental Divide. Major streams here provide spawning grounds for the Big Hole River fishery.

Area C1-001 at lower elevations provides some big game winter range, but most deer and elk migrate from this area in early winter.

Area D1-001 provides summer forage and cover for deer, elk and moose. Arctic grayling are common in Mussigbrod Lake and Creek.

The Bitterroot portion contains summer forage and cover for deer, elk and moose. Mountain goats inhabit the more rugged terrain along the Continental Divide.

3. Water

Water quality in 1-001 units is high, with all streams providing tributaries to the Big Hole River. Streams are heavily used for irrigation between June and September. The area contains many miles of irrigation ditches.

Area 1-001C--during low water periods, approximately 60 percent of the runoff reaches the Big Hole River.

Area A1-001 contains many miles of irrigation ditches and a dam at the outlet of Mussigbrod Lake.

Area 1-001 Bitterroot--water quality is high. Balsam Creek provides a tributary to the Bitterroot River.

4. Livestock Operations

A large portion of the Anaconda Range is being grazed by permitted livestock, consisting entirely of cattle and horse allotments.

Area 1-001A is all under the Pintler Creek Allotment #48.

Area 1-001B has not been allotted for grazing permits.

Area 1-001C--only the lower southern and extreme western portions of this unit are grazed by cattle and horses. Parts of four allotments are included in this area; #46 (Mudd Creek), #48, (Pintler Creek), #59 (Fishtrap), and #39 (LaMarche), which is a closed allotment. This area is predominantly forest, with some grassland parks and stringers along the southern boundary.

Area A1-001--approximately 90% of this area is grazed by cattle and horses, in five existing open allotments which encompass 24.57 miles of fence and four spring developments; #48 (Pintler Creek), #55 Clam Valley), #62 (Howell Creek), #63 (Johnson Creek), and #65 (Mussigbrod). This involves 6 permittees and 604 cow/calf pairs. Rangeland consists of open sage and grassland at lower elevation, complemented by scattered moist bottomlands and grass stringers.

Area B1-001 contains the top 1/5 of #65 (Mussigbrod Creek Allotment), but includes no grazeable land.

Area C1-001 is grazed by cattle and horses under the Johnson Creek Allotment #63.

Area D1-001 is covered with the Mussigbrod Creek Allotment #65 and Clam Vally Allotment #55.

Only the gentle lands adjacent to Balsam Creek are used by livestock in the Bitterroot portion of 1-001.

5. Ecology

Upper elevations exhibit mostly subalpine fir/whitebark pine habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

To date there are no known threatened and endangered plant species on National Forests and Grasslands according to Bob Gale, Northern Region T&E specialist. However, there are Penstemon lemhiensis; Scrophulariaceae and Botrychium paradoxum which may occur on or near roadless areas 1-001A, 1-001B, and 1-001C.

6. Timber

Vegetative cover in this entire area is predominantly forest at higher elevations along the southern incline of the Anaconda Range, gradually sloping to stringers of grassland along the many creek bottoms and small meadows scattered throughout the area. Valley bottoms also contain willow and wet meadow at lower elevations, grading into aspen and Engelmann spruce at higher elevations. The forest is predominantly lodgepole pine, with some Douglas-fir on lower south-facing slopes. Whitebark pine and subalpine fir grow at higher elevations in the head of Mussigbrod Creek and along a few elevated ridges. Timber has been harvested in Mudd and Fishtrap drainages in 1-001C. The forest here contains substantial amounts of harvestable timber-growing sites. Timber harvest in A1-001 has been concentrated in the Howell Creek timber sale. B1-001 and 1-001 Bitterroot contain high elevation timber types, most of which are not on sites suited for timber production because of steep slopes, poor stocking, and rocky ground.

7. Minerals/Oil and Gas
Geologic favorability is high within 1-001B for locatable minerals. Geologic favorability for locatable minerals is moderate within 1-001C, A1-001, B1-001, C1-001, D1-001, and the Bitterroot portion. Geologic favorability for oil and gas is moderate for all areas.

8. Cultural Resources
Old rifle pits and mining remnants provide evidence of area history. Although past use of the entire Big Hole area by native Americans suggests that undiscovered cultural resources may exist in this roadless area, none have specifically been identified.

9. Land Use Authorizations
Land use authorizations include Bender cabin, Bender pasture, and Bender lookouts in A1-001 on Johnson Creek, with numerous trapper and miner cabins, irrigation ditches, several fences, and telephone and electrical power transmission lines. There are no land use authorizations in the Bitterroot portion.

10. Non-Federal Lands
There are 100 acres of private land in D1-001. None of the other portions of the North Big Hole Roadless Area contain private land.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire occurrence is low in all areas, generally, but a potential exists in A1-001 due to downfall of substantial amounts of lodgepole pine at lower elevations (near the Northside road). 1-001B and C have moderate-to-extreme fire conditions.

2. Insect and Disease
In some areas of 1-001, wilderness designation may increase the risk of mountain pine beetle infestations which are presently sporadic and endemic. This insect presents slight risk in areas 1-001B and C.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The northern boundary of the North Big Hole Roadless Area is adjacent to the Anaconda-Pintler Wilderness and is situated about 90 miles from the Lee Metcalf Wilderness. Use of these wildernesses is presently moderate, depending upon the particular area. Population centers close to 1-001 are Butte, 50 miles; Anaconda, 50 miles; Hamilton, 60 miles; and Missoula, 100 miles.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness Preservation System. Wilderness designation would increase

the land in the NWPS, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

3. Public Interest

During RARE I, portions of the North Big Hole were inventoried in #44 Bender and #39 LaMarche Roadless Areas and in an Essentially Roadless Area referred to as "Thompson." All of these areas were recommended for nonwilderness uses in that Study.

In 1977 the North Big Hole roadless and Essentially Roadless Areas, and a small, adjacent roadless area on the Bitterroot National Forest were inventoried as a single roadless area to be studied in the RARE II process. The Beaverhead National Forest was, at that time, conducting a Forestwide planning process, and, through that process and in coordination with the Bitterroot National Forest, evaluated the wilderness potentials of the 1-001 areas. The decision reached through the Forest planning process was to retain two portions of the roadless area (then referred to as A1-001 and B1-001) in the RARE II process and to manage the balance of the area for other nonwilderness resource values. Public comment during the Forest planning process indicated some support for wilderness classification for areas A and B1-001. However, there was also public controversy, particularly over area A1-001, because of the timber values in that area.

The majority of the area in A and B1-001 was proposed for wilderness in RARE II by the Montana Wilderness Association. Alternative W, proposed by MWA, was supported by the environmental organizations. In addition, B1-001 received much favorable public comment for classification as a wilderness. Although the remainder of 1-001 was not considered highly controversial during the RARE II process, there was opposition for a wilderness designation from those concerned about the area's timber potential.

In 1983 the 1-001 area was again included in the Roadless Area inventory. Comments received in reply to the "1983 Roadless Area Evaluation" brochure indicated strong support for wilderness designation of much of the inventoried area. Many of the respondents indicated that the area would be an "ideal addition to the existing wilderness," that the area had high wildlife, scenic, and watershed values. Some commented that the area should become wilderness to protect it from degradation of surface values by oil and gas exploration and development. Others stated that the area added diversity to the existing wilderness and that recreation uses exceed all other values. Some based their support for wilderness on the idea that the designation would protect the Big Hole watershed. The Forest received no comments that opposed wilderness designation specifically for these areas.

Comments on the 1985 Revised Draft again indicated continued support for wilderness designation of all or portions of the North Big Hole Roadless Area. The area drew strong support particularly from the many commentors for the "Conservationist Alternative" in which 37,000 acres of the Beaverhead Forest portion of Roadless Area 1-001 were recommended for wilderness. Most of the support came from regional and national commentors although some local groups and individuals also voiced support. Minor opposition to wilderness designation of the area was expressed, primarily by those who generally opposed wilderness, supported "multiple use," or had specific concerns for portions of the area. Some Big Hole Valley residents were concerned about expansion of the wilderness recommendation beyond the 6,571 acres proposed for wilderness in the Revised Draft EIS.

Timber harvest in the LaMarche Creek area concerned some respondents who expressed interest in retaining the scenic values and winter recreation opportunity and quality in the area adjacent to the Sundance Lodge.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Management Emphasis by Alternative for the North Big Hole Roadless Area (1-001), Beaverhead Portion

		Alternative (Net Acres)									
Beaverhead Management Emphasis		A CD	B	C	D	F	G	H*	I	W	S** PA
Group 1: 1/	1-001A	0	0	715	715	715	0	0	715	0	0
	1-001B	0	0	3217	3217	0	0	0	3217	0	0
	1-001C	0	0	14,372	14,372	0	0	0	14,372	0	0
	A1-001	0	0	24,332	24,332	24,332	0	0	24,332	24,332	0
	B1-001	6571	0	6571	6571	6571	6571	6571	6571	6571	6571
	C1-001	0	0	0	0	0	0	0	1521	0	0
	D1-001	0	0	0	0	0	0	0	2370	0	0
Group 2: 2/	1-001A	658	715	0	0	0	715	715	0	715	715
	1-001B	2575	3089	0	0	3057	2576	1614	0	2736	1663
	1-001C	9917	12,072	0	0	12,072	10,635	11,210	0	11,785	7086
	A1-001	12,166	15,329	0	0	0	7056	2677	0	0	2410
	B1-001	0	0	0	0	0	0	0	0	0	0
	C1-001	1278	1217	1384	0	1506	852	1278	0	415	984
	D1-001	1398	2062	1635	0	2299	2109	2086	0	2204	1415
Group 3: 3/	1-001A	0	0	0	0	0	0	0	0	0	0
	1-001B	0	0	0	0	0	0	0	0	0	0
	1-001C	0	0	0	0	0	0	0	0	0	0
	A1-001	0	0	0	0	0	0	0	0	0	0
	B1-001	0	0	0	0	0	0	0	0	0	0
	C1-001	0	0	0	0	0	0	0	0	0	0
	D1-001	0	0	0	0	0	0	0	0	0	0
Group 4: 4/	1-001A	57	0	0	0	0	0	0	0	0	0
	1-001B	642	96	0	0	160	641	1603	0	481	1554
	1-001C	4455	1725	0	0	2300	3593	3018	0	2300	7073
	A1-001	12,166	8273	0	0	0	17,033	20,925	0	0	7787
	B1-001	0	6242	0	0	0	0	0	0	0	0
	C1-001	243	304	137	1506	15	654	243	0	106	537
	D1-001	972	24	735	2370	71	190	142	0	166	151
Group 5: 5/	1-001A	0	0	0	0	0	0	0	0	0	0
	1-001B	0	32	0	0	0	0	0	0	0	0
	1-001C	0	575	0	0	0	144	144	0	287	213
	A1-001	0	730	0	0	0	243	730	0	0	14,135
	B1-001	0	329	0	0	0	0	0	0	0	0
	C1-001	0	0	0	15	0	15	0	0	0	0
	D1-001	0	284	0	0	0	71	142	0	0	804
BEAVERHEAD TOTAL:		53,098	53,098	53,098	53,098	53,098	53,098	53,098	53,098	53,098	53,098

---

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

1/ Group 1 is Wilderness emphasis.

2/ Group 2 is Timber emphasis.

3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.

4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.

5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Management Emphasis by Alternative for the North Big Hole Roadless Area (1-001), Bitterroot Portion

Alternative (Net Acres)

Bitterroot Management Emphasis	A	B	C	E PA*	E1 PA*	F CD**	G	H	J
Wilderness: 1/	0	0	0	0	0	0	3628	0	3139
Timber/Range: 2/	2872	2872	403	1901	1901	2068	0	436	240
Winter Range: 3/	0	0	0	0	0	0	0	0	0
Partial Retention: 4/	0	0	629	0	0	0	0	176	24
Roaded Retention: 5/	0	0	0	0	0	0	0	0	288
Unroaded Retention: 6/	0	0	0	0	0	0	0	0	0
Riparian: 7/	0	0	70	20	20	0	0	20	0
Roadless-Semi Primitive: 8/	819	819	2585	1770	1770	1623	63	3059	0
BITTERROOT TOTAL:	3691	3691	3691	3691	3691	3691	3691	3691	3691
ROADLESS AREA TOTAL:	56,789	56,789	56,789	56,789	56,789	56,789	56,789	56,789	56,789

1/ Relates to Beaverhead Group 1, on previous page.
2/ Relates to Beaverhead Group 2, on previous page.
3/ Relates to Beaverhead Group 5, on previous page.
4/ Relates to Beaverhead Group 2, on previous page.
5/ Relates to Beaverhead Group 5, on previous page.
6/ Relates to Beaverhead Group 4, on previous page.
7/ Relates to Beaverhead Group 5, on previous page.
8/ Relates to Beaverhead Group 4, on previous page.

Summary of Management Emphasis, Beaverhead Portion

Alternative (Net Acres)

Management Emphasis	A CD*	B	C	D	F	G	H	I	W	S PA**
Roaded:										
Decade 1	15,882	17,734	3891	0	21,480	26,769	14,464	0	22,195	11,352
Decade 5 ***	46,527	53,098	3891	0	21,480	29,941	25,592	0	22,195	20,084
Roadless:										
Decade 1	30,645	35,364	0	3891	0	19,758	32,063	0	0	35,175
Decade 5 ***	0	0	0	3891	0	16,586	20,935	0	0	26,443
Wilderness:	6571	0	49,207	49,207	31,618	6571	6571	53,098	30,903	6571

* CD is the Current Direction Alternative.
** PA is the Proposed Action Alternative.
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

Summary of Management Emphasis, Bitterroot Portion

	Alternative (Net Acres)								
Management Emphasis	A	B	C	E PA*	E1 PA*	F CD**	G	H	J
Roaded:									
Decade 1	2000	2000	700	1300	1300	1500	0	600	500
Decade 5 ***	2872	2872	1102	1921	1921	2068	0	632	552
Roadless:									
Decade 1	1691	1691	2991	2391	2391	2191	63	32	52
Decade 5 ***	819	819	2589	1770	1770	1623	63	0	0
Wilderness:	0	0	0	0	0	0	3628	0	3139

* PA is the Proposed Action Alternative.

** CD is the Current Direction Alternative

*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

(Impacts discussed below are considered for the entire roadless area. For a more complete discussion for the Bitterroot portion, see the Draft Environmental Impact Statement for that Forest.)

1. Designation: Wilderness
Management Emphasis: Wilderness

100 percent of the North Big Hole Roadless Area (A through D1-001 and 1-001A through C) is designated wilderness in Alternative I. 93 percent is designated wilderness in Alternatives C and D. Approximately 60 percent of the area is designated wilderness in Alternatives F and W. Area B1-001 is designated wilderness in Alternatives A, G, H and S (the Proposed Action). This constitutes 12 percent of the total area.

Wilderness can slightly enhance the area's wilderness attributes since there are some existing uses and facilities not usually associated with wilderness designation. These are found in the lower or fringe areas of D1-001 and A1-001. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use--the Seymour Creek road #484, Pintler Creek road #185, and portions of the Northside road #1203 and the York Gulch road #1203.c (Wise River Ranger District)--could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use (Wise River Ranger District) these trails would be naturally narrowed in time. The Northside and York Gulch roads enter area 1-001C in sections 6 and 7, T1N, R14W, and section 1, T1N, R15W.

The 3850 to 44,831 acres of land tentatively suitable for timber production would not be available under this prescription depending upon the alternative chosen. This would remove about 21.6 to 259.2 MMBF in standing volume from the Forest timber base depending upon the alternative chosen. This land is distributed in stringers and patches located on middle and lower slopes in Roadless Areas A through D1-001. The timber is predominantly lodgepole pine with minor amounts of other species growing on site class V and VI land. Existing volumes are highly variable due to differences in site productivity and stocking density. The lower elevations contain the better timber sites with existing volumes averaging 7-12 MBF/acre.

The loss in timber volume is not likely to be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 2511 AUM's, would continue on the portions of the 8 allotments involved. Some of the involved allotments need to be placed under improved management systems to improve or maintain riparian values and range conditions. Presently, some permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and/or pack mules. This would require more time and cost. Permittee commitment to managing livestock is confined to lower elevations, on sagebrush hillsides, riparian bottomlands and wet and dry meadows.

Grazing systems now in effect would continue. Wilderness designation may preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource and could effect eventual livestock carrying capacity.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes might occur to various wildlife species, depending on natural events within these roadless areas, and effect wildlife populations negatively or positively. Basically wildlife habitat management would be accomplished through natural fires and long-term affects would approximate a natural situation. Wildlife population levels would vary, sometimes greatly. Big game key habitats, such as meadows and sagebrush foraging areas, goat lick along the West Fork of Fishtrap Creek and moose winter range along the major creek bottoms, would be maintained. The key blue heron rockery at a small pond along a ridge near the Middle Fork of Fishtrap would be maintained. There are no notable winter ranges in areas west of Pintler Creek though occassionally a few elk may winter in the lower portions of D1-001 and A1-001. Elk spring, summer and fall habitat would not be significantly impacted though some sagebrush or open areas may be lost through conifer encroachment.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances where there are existing developments (irrigation ditches, fences) and locations where visual impacts would be minor. Irrigation ditches are located in East Fork Mudd Creek, West Fork Fishtrap Creek, Middle Fork Fishtrap Creek, and East Fork Fishtrap Creek.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgeople pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir.
>
> Water quality and fisheries quality would be maintained at natural levels. Presently, in D1-001, a headgate and irrigation ditch exist. Maintenance activities on these structures may be restricted.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of more wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access, but this would mean retaining the present high quality experience.

Under a wilderness designation, this area would eventually be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Presently there is little or no mineral activity west of Pintler Creek.

Current information indicates mining claims exist in Mudd Creek. No impact on wilderness character from the exercise of valid existing rights is anticipated.

As of December, 1983, there were approximately 32,955 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the North Big Hole Roadless Area (A, C and D1-001 and 1-001A through C) are assigned to these prescriptions in all Alternatives except D and I; from 6 percent in Alternative C, to 65 percent in Alternative B. Area B1-001 is not assigned to there prescriptions in any alternative.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal requires construction of permanent roads and modifies the natural appearance of the area for approximately 25 to 40 years, (or until the regeneration is high enough to hide the scars and present the appearance of an old burn). The stumps and incompletely burned slash piles would also be long term, on site evidences of man's activities. The cutting units themselves would be impacts visible from Highway 43 and Forest access roads to the Anaconda-Pintler Wilderness. Much of the higher productivity timber sites are at lower elevations and on gentle north-facing slopes. These areas would not be visible from the Big Hole Valley and area highways but would be visible from the Anaconda-Pintler Wilderness Area.

Under timber prescriptions with visual quality objectives of retention/partial retention there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit minimally by the creation of transitory range which may become available for grazing. Also, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts may be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for semi-primitive recreation will be somewhat reduced under these prescriptions. Primitive recreation will be affected very little.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area. Security cover is located nearby in the Anaconda-Pintler Wilderness.
>
> Water quality and fisheries may be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend

to perpetuate lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required.
Harvest will favor seral stands of lodgepole pine. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. Persons wanting to enter the Anaconda-Pintler Wilderness would have to pass through this area to reach the wilderness. Visitors climbing the high peaks would look down on managed (harvested areas) reducing their feelings of solitude. Outfitter and Guide operations would need to move into the Wilderness to get away from harvested areas and associated roads. Their operations would be concentrated into a smaller area. Publics valuing wilderness would not be supported by this management emphasis.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, or 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, or 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphases: Range (No Timber, High Intensity Range and Low Intensity Wildlife)

No Alternatives considered assignment of any acres to these prescriptions in the Big Hole Roadless Area (A through D1-001 and 1-001A through C).

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-primitive Recreation/Custodial

Portions of the North Big Hole Roadless Areas (A, C and D1-001 and 1-001A through C) are assigned these prescriptions in all Alternatives except I; from as little as 2 percent in Alternative C to 49 percent in Alternative H.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing natural conditions although no acreages will be large enough to maintain the wilderness potential. The prescriptions in this category allow roads to access special uses or mineral development. Custodial management also allows road construction for access to other management areas. If roads are constructed, visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not be significantly affected.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses on the scattered parcels would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. Use in these areas is mostly in hunting season and as wilderness portals to the Anaconda-Pintler Wilderness. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

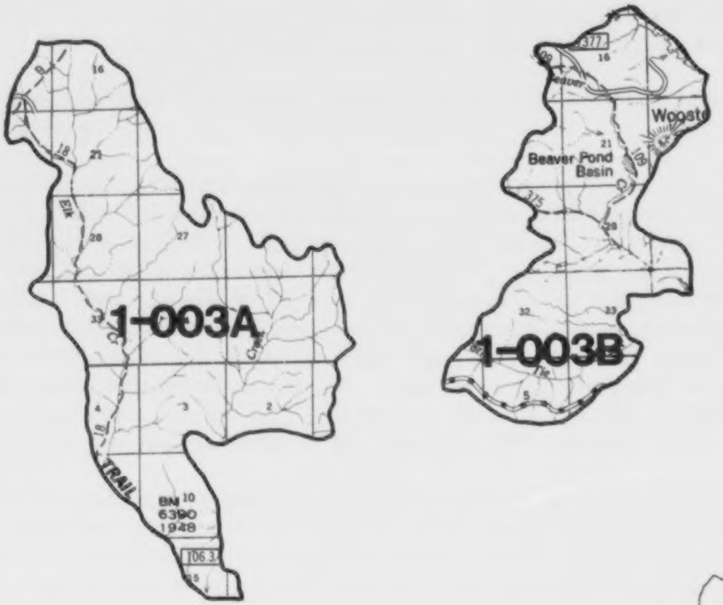
5. Designation: Nonwilderness
   Management Emphases: High Intensity Range/Wildlife
   Moderate and Low Intensity Range, Wildlife, and Riparian
   (No Timber)

Only a small portion of the North Big Hole Roadless Area is assigned these presciptions in Alternatives B, D, G, H and W; from 1 percent in Alternatives D and G to 4 percent in Alternative B. 25 percent of the area is assigned to these prescriptions in Alternative S, the Proposed Action.

The effects of implementing these prescriptions will be similar to those described under "Management Emphases: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation, such as sagebrush burning for forage improvement, could occur, the impacts of which could have limited impacts on the wilderness capabilities of the area. These impacts would be relatively short-term.

ROADLESS AREA 1-003

BEAVER LAKE


1-003A
1-003B
Elk
TRAIL
BM 6390 1948
106 3
377
Beaver Pond Basin
Wooste
375
16
21
28
27
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33
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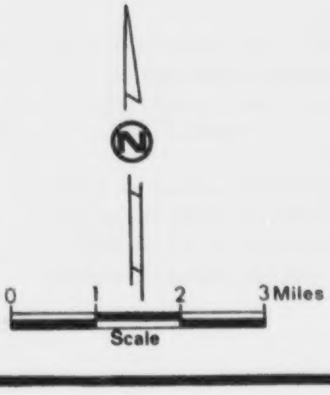
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WEST BIG HOLE PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: Beaver Lake (1-003)		Gross Acres	Net Acres
	1-003A	7,926	7,926
	1-003B	5,548	5,548
	Total	13,474	13,474

I. DESCRIPTION

The Beaver Lake Roadless Area is located in the West Big Hole Planning Unit on the lower slopes of the Anaconda Range. Since the 1977 inventory, the area has been separated into two parcels by timber sale activities.

Area 1-003A is defined on the west by a boundary that loosely follows the center of Section 17 and the western edges of Sections 21, 28, 33, and 4 of R18W, T1S. Trail Creek determines the southwestern boundary. The eastern edge of 1-003A terminates at a trail extending from Forest road #1210. The Continental Divide borders the north.

Area 1-003B is surrounded by developed Forest land on three sides and by C1-001 on the north. It contains all or portions of Sections 21, 28, 32, 33 of R17W, T1S and Sections 4,5,6, T27N, R17W.

Both areas are accessible from the south off Highway #43 and on the north by Johnson Creek. Access is provided from these roads and through several private roads that access lower Trail and Tie Creeks (road 1203.1). Foot trails reach the unroaded regions of the area. Johnson and Bender trails join the trail system entering the Anaconda-Pintler Wilderness.

The overall aspect for both areas is similar--broad, rolling, gentle topography to moderately steep foothills located at the head of tributaries which feed the North Fork of the Big Hole River. Some glacial moraine occurs near the Forest boundary on lower Tie and Johnson Creeks. Some of this area has been weakly glaciated, but typical glacial landforms are not evident. Joseph and Trail Creeks occupy fairly broad, flat valley bottoms. Elevations generally do not exceed 7,700 feet (Wooster Mountain). This country is not particularly rugged but is very diverse with subalpine areas along the Continental Divide and more productive sites at lower elevations. About 70 percent of the 25-30" of annual precipitation occurs as snow.

Soils in most of the area are sandy loams derived from fine-grained igneous rocks. Stony, sandy loams and loamy sands occur on the glacial moraine in Lower Johnson and Bender Creek.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Extensive timber development has significantly reduced the natural appearance of both areas. Impacts of man's activities (timber cuts) surrounding the unit are apparent. Many other clearcuts are under contract in the Tie Creek area but are not yet logged.

B. OPPORTUNITIES FOR SOLITUDE

Because these areas are independently small and possess no unique or spectacular vegetation or topography, 1-003A and B are not remarkable for their solitude opportunities. Although thickly timbered, there are points from within the unit where sights and sounds of man's activities are apparent. The broken nature of the units also detracts from an atmosphere of solitude.

C. PRIMITIVE RECREATION OPPORTUNITIES

Gold-panning has been successful in some of the area streams. Elk hunting contributes approximately 90 percent of the primitive recreation use. Backpacking and hiking are deterred by thick vegetation and heavy downfall in the region.

D. OTHER FEATURES

The Continental Divide Trail corridor briefly follows the northern boundary of 1-003A.

E. MANAGEABILITY AND BOUNDARIES

Since the 1977 inventory, development has split the Beaver Lake roadless area into two isolated parcels, greatly complicating its manageability for wilderness. Boundaries presently exclude areas of extensive development for timber sale activities on three sides and a high standard Forest road on the fourth. Boundaries have been modified to preclude development; however, these boundaries in 1-003B are not readily definable on topographic features. If the boundaries were located on prominent topographical features, the size of the parcel may be reduced to below the 5,000-acre criteria for wilderness consideration. 1-003A is manageable and boundaries are identifiable on the ground.

1977 Inventory Acres:	29,800 gross	29,800 net
1983 Inventory Acres:	13,474 gross	13,474 net
Change	-16,326	-16,326
Reasons for change in inventory:		
Existing Timber Sale and Roads	-18,011	-18,011
Acreage Recalculation	+ 1,685	+ 1,685

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-003A VALUE	1-003B VALUE	COMBINED VALUE
Acres				
Gross	Acres	7926	5548	13,474
Net	Acres	7926	5548	13,474
Recreation				
Primitive	RVD's	100	70	170
SPNM	RVD's	146	102	248
SPM	RVD's	144	101	245
Range				
Existing obligated suitable	Acres	406	137	543
Allotments	# of	1	1	2
AUM's	AUM's	190	37	227
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0
Timber				
Tentative suitable	Acres	6190	5057	11,247
Standing Volume	MBF	31,718	25,891	57,609
Corridors				
Existing/Potential	# of	1	0	1
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	0	198	198
Elk				
Winter Habitat	Acres	0	0	0
Deer				
Winter Habitat	Acres	0	0	0
Significant Fisheries				
Stream Miles	Miles	16.5	8.2	24.7
Stream Habitat	Acres	7.4	5.9	13.3
Lakes	# of	0	0	0
Lake Habitat	Acres	0	0	0
Water Developments				
Existing	# of	0	0	0

(Resource Potentials, continued)

Minerals				
Very High	Acres	0	0	0
High	Acres	3170	2219	5389
Moderate	Acres	4756	3329	8085
Low	Acres	0	0	0
Claims	# of	7	3	10
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	7926	5548	13,474
Low	Acres	0	0	0
Oil and Gas Leases				
Leased area	Acres	0	2248	2248

---

1. Recreation

Dispersed recreational pursuits in both units are not significant except in the southern portion of 1-003A. Elk hunting comprises 90% of the total recreation in both units and fishing and camping in the stringer meadow near Trail Creek (1-003A) is also a popular seasonal activity. There is some motorized camping in Sheep Creek.

2. Wildlife

Summer forage and cover is provided throughout the areas for elk and a few moose. The wildlife habitats also include elk calving and rutting areas, elk wallows, and riparian zones. There have been unverified sightings of timber wolves. Other small nongame furbearers common to western Montana are present.

3. Water

Water quality is high in 1-003A and 1-003B; most of the precipitation occurs as snowfall. The major drainage of 1-003A is Elk Creek which flows southward to Joseph Creek. Tie Creek, Beaver Creek and Johnson Creek provide tributaries to the Big Hole River through 1-003B. There are no water developments.

4. Livestock Operations

Rangeland is open grassland at lower elevations and stringer meadows scattered throughout the areas. Range improvements include several short segments of drift fence. 1-003A is entirely included in the Trail Creek Grazing Allotment #76; 1-003B is grazed under the Tie Creek Allotment #75. These permits allow for grazing of 412 cow/calf pairs and 90 yearlings.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of these areas are currently occupied by seral lodgepole pine stands ranging in age from 80-50 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

To date there are no known threatened and endangered plant species on National Forests and Grasslands according to Bob Gale, Northern Region T&E specialist. However, there are Botrychium paradoxum; Ophiograssaceae and Penstemon lemhiensis; and Scrophulariaceae which may occur on or near roadless area 1-003B.

6. Timber

Vegetative cover is predominantly forest, with stringers of grassland along the many creek bottoms and small meadows scattered throughout the area. The Forest here is dominantly lodgepole pine, with some Douglas-fir on south-facing slopes. Englemann spruce and subalpine fir grow in the wet basins and along stream bottoms. Whitebark pine and subalpine fir occupy a few high elevation ridges.

These areas contain some of the most productive timber sites on the Wisdom Ranger District. Dense commercial forest areas contain substantial amounts of harvestable timber volume, primarily lodgepole pine with spruce on wet sites. Growing sites range from 20-90 cu. ft./ac./yr. Average sight distance is 50 to 100 yards. Cutting units surround and penetrate the area along with numerous other small timber sales and accompanying roads.

7. Minerals/Oil and Gas

The geologic favorability for locatable minerals is moderate (60 percent) to high (40 percent). The geologic favorability for oil and gas is moderate. Past and current activity has been limited.

8. Cultural Resources

The Nez Perce Trail is believed to have followed meadows on the south edge of 1-003A. There has been interest expressed to locate and designate this trail on the ground. The Lewis and Clark Historical Trail #1063 in 1-003A follows somewhat the same route in this area along Trail Creek.

9. Land Use Authorizations

There are no land use authorizations within these units.

10. Non-Federal Lands

There is no private land within 1-003A or 1-003B.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Previously fires have occurred in this area, but at this point the fire incidence for 1-003A and 1-003B is low. There is a potential for large fires because of the bug-killed downfall in the area. A mountain pine beetle epidemic occurred in the late 1930's, and sustained infections of dwarf mistletoe killed 60 percent of the mature lodgepole pine.

2. Insect and Disease

The risk of mountain pine beetle infestation in lodgepole pine is low to moderate at the present time.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
Population centers within short distances include Anaconda (75 miles), Hamilton (60 miles), Butte (100 miles) and Missoula (100 miles). These units are approximately eight miles south of the Anaconda-Pintler Wilderness.

2. Contribution to Wilderness Preservation System
Ecosystems and wildlife species are not significantly represented. However, the major, long-term considerations for contribution to the NWPS are the elk populations that are supported by this roadless area.

3. Public Interest
During the RARE I analysis, these areas were studied as a single unit, Beaver Lake #45. The RARE I decision was to manage for nonwilderness uses. Later, in the RARE II study, these areas were again inventoried as roadless and assigned #1-003. The Beaverhead National Forest 1978 Land Management Planning process evaluated the wilderness potential and resource values of the area. Through this process, 1-003 was assigned a nonwilderness use and was eliminated from the RARE II study. In the reevaluation of roadless areas in 1983, this area was divided for study into 1-003A and 1-003B due to extensive timber developments. Public comment on the Roadless Area Evaluation brochure expressed little interest to include 1-003A and 1-003B in a wilderness classification. The apparent major local concern is that the area is being heavily logged resulting in loss of opportunity for quality big game hunting.

Other than those who supported wilderness for all roadless areas, there was no support expressed for wilderness designation in comments on the 1985 Revised Draft EIS.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Beaver Lake Roadless Area (1-003)*

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H**	I	W	S***
Group 1: (Wilderness)	0	0	0	0	0	0	0	13,474	0	0
Group 2: (Timber)	11,128	11,754	11,571	4438	11,920	9725	12,435	0	11,255	12,534
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	0	0	7054	0	0	0	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	2346	515	904	1982	1475	3028	880	0	2140	28
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	1205	999	0	79	721	159	0	79	912
TOTAL:	13,474	13,474	13,474	13,474	13,474	13,474	13,474	13,474	13,474	13,474

* Since the portions of the Beaver Lake Roadless Area are allocated similarly in the alternatives, no attempt is made to show how each portion is allocated.

** Land designations are tha same for H, HA and H(dept); therefore only H is displayed.

*** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	11,247	11,247	11,134	0	11,247	11,247	11,247	0	11,247	10,425
Decade 5 *	13,474	13,474	13,474	0	13,474	13,474	13,474	0	13,474	13,474
Roadless:										
Decade 1	2227	2227	2340	13,474	2227	2227	2227	0	2227	3049
Decade 5 *	0	0	0	13,474	0	0	0	0	0	0
Wilderness:	0	0	0	0	0	0	0	13,474	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Beaver Lake Roadless Area (1-003A&B) is recommended for wilderness in Alternative I.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 11,247 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 57.6 MMBF in standing volume. These area contain some of the most productive timber sites on the Wisdom Ranger District. Dense commercial forest areas contain substantial amounts of harvestable timber volume, primarily lodgepole pine with spruce on wet sites.

The loss in timber volume would not likely be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 227 AUM's, would continue on the portions of the two allotments involved but management practices may change. Presently, some permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and/or pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation may preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource. This could affect eventual livestock carrying capacity.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Elk winter ranges would continue to provide necessary forage. Summer forage and cover for elk and a few moose are provided for in this area. Long term changes might occur to various wildlife species, depending on natural events within this roadless area, and affect wildlife populations negatively or positively. Basically wildlife habitat management would be accomplished through natural fire, and long term effects would approximate a natural situation. Wildlife populations would vary; sometimes greatly.

Other nonpriced resource values are affected as follows:

Visual quality would be retained within the area. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.

Wilderness designation would increase the land base in the Wilderness Preservation System.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, particularly in Alternative I, resulting in a loss of jobs and income. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences could also be altered to those that use vehicles, however, the roadless setting and the associated hunting quality would be retained.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on ten mining claims will be severely restricted, but may have a substantial impact on the areas' wilderness character.

As of December, 1983, there were approximately 2248 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Beaver Lake Roadless Area (1-003A&B) are assigned these prescriptions in all alternatives except I; from 33 percent in Alternative D to 93 percent in Alternative S, the Proposed Action.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless.resources in that timber removal requires the construction of permanent roads and modifies the natural appearance of the area for approximately 25 to 40 years (or until the regeneration is high enough to hide the scars and present the appearance of an old burn). The stumps and incompletely burned slash piles would be long term on site evidence of man's activities. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that they would most likely be obvious only to someone passing through the stand. Under 8 alternatives, a majority of the area would be reduced and the wilderness potential foregone.

The associated roads will eliminate the "roadless" nature of this area, in most alternatives, by the end of the first decade. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Under this management emphasis, all of the tentatively suitable timber will be available in seven of the alternatives. Alternative D will access less than half of the timberland whereas alternative G will access about 70 percent.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> Hunting is the primary recreation activity in the area. Under this emphasis the roadless setting will be greatly altered reducing the quality of the hunt.
>
> Elk security will be reduced in the short-term when existing stands are harvested. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.

Water quality and fisheries in the drainages of Elk, Tie, Beaver, and Johnson Creeks would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

Extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for hunting, resulting in a change in the quality of the experience. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescriptions would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Fifty-two percent of the Beaver Lake Roadless Area (1-0003A&B) is assigned to these prescriptions in Alternative D only.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retained or partially retained. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities, primarily hunting, may be adversely affected under some of these prescriptions where forage competition and aversion between elk and livestock occurs. This would reduce the opportunity for hunting success; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.
>
> Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because of the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

At most 22 percent of the Beaver Lake Roadless Area (1-003A&B) is assigned to these prescriptions in 9 of 10 alternatives. The acreages are in scattered pieces throughout the area.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing natural conditions although no acreages will be large enough to maintain the wilderness potential. The prescriptions in this category allow roads to access special uses or mineral development. Custodial management also allows road construction for access to other management areas. If roads are constructed, visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not be significantly affected.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses on the scattered parcels would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
   Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

At most 9 percent of the Beaver Lake Roadless Area (1-003A&B) is assigned to these prescriptions in Alternatives B, C, F, G, H, W and S.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the natural condition of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

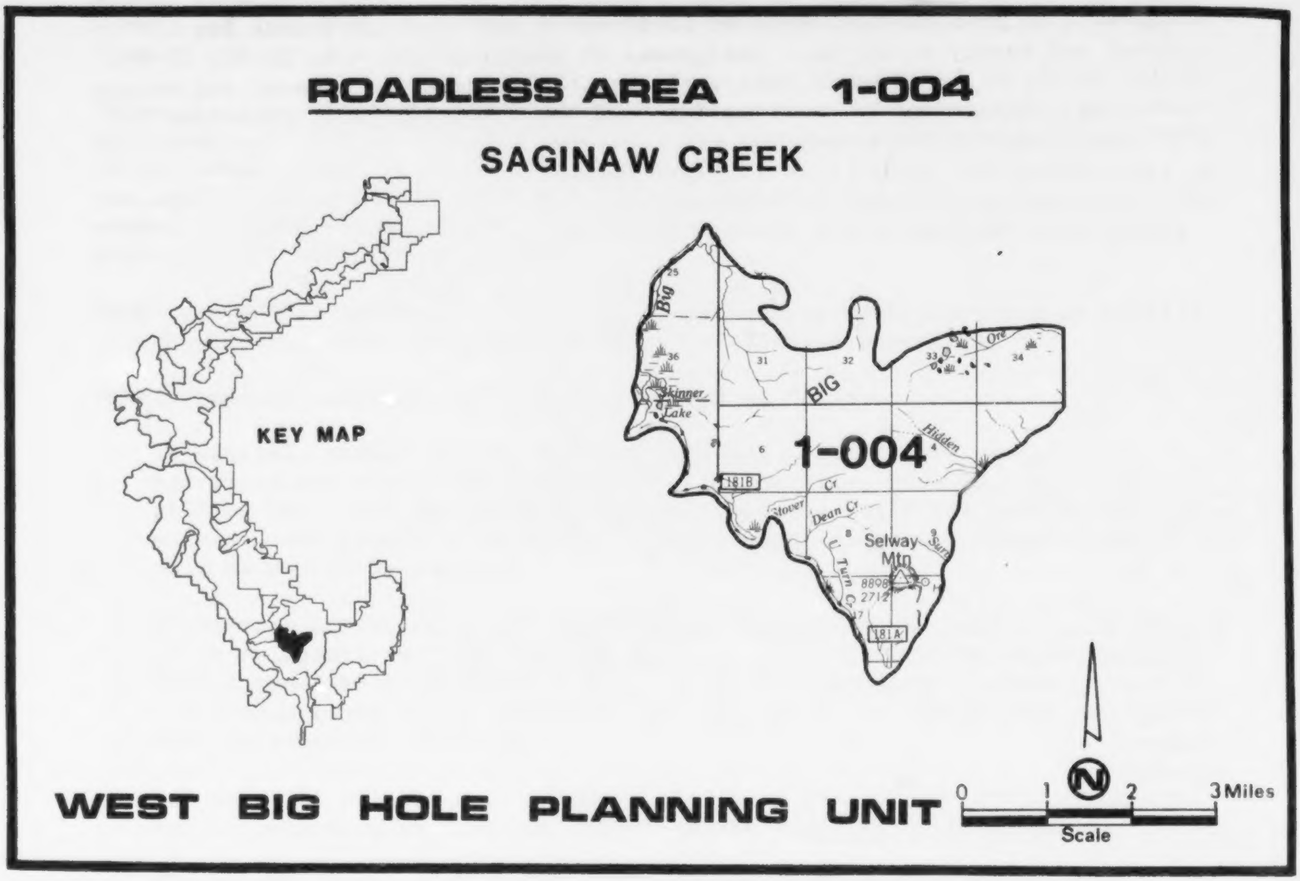
Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management there will be opportunities to improve fisheries habitat.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.


ROADLESS AREA 1-004
SAGINAW CREEK
KEY MAP
1-004
Big
Skinner Lake
BIG
Hidden
Cr
Stover
Dean Cr
Ore
Selway Mtn
8898
2712
U Turn Cr
181B
181A
25
31
32
33
34
36
6
8
17
WEST BIG HOLE PLANNING UNIT
0
1
2
3 Miles
Scale
N

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

	Gross Acres	Net Acres
Roadless Area Name: 1-004 Saginaw Creek		
Number of Acres:	8,493	8,493

I. DESCRIPTION

Saginaw Creek #1-004 is located in the southern area of the West Big Hole Planning Unit on the eastern slopes of the Beaverhead Mountains. It extends from the Big Hole River on the north to Selway Mountain on the western edge and to Bloody Dick Peak on the south. Access is from Highway #278 and Forest road #181 near Jackson. The area centers around the Big Hole-Selway Divide. Except for Selway Mountain (elevation 8,898 feet), the terrain is rolling to gently undulating with long, smooth, rounded footslopes along the face of the Big Hole Divide (elevation about 6,800 feet). Englebough Creek and Ore Creek are the major drainages that flow north to the Big Hole River. Stover, Dean, and U Turn Creeks flow southwest to Bloody Creek near the western boundary, and several tributaries to Selway Creek originate in the eastern portion of the unit.

Moderately deep, rocky loams and sandy loams derived from quartzite and other metamorphic rocks occur on higher elevation ridges while soils on gentler slopes are deep loams and clay loams.

Vegetation on lower elevation is grassland and sagebrush/grassland with intermingled patches of forest. Ridges appear as rolling, south-facing slopes. Rocky outcrops appear in the remote western high country. The timber consists mainly of lodgepole pine with Douglas-fir on the south slopes. At lower elevations, creek bottoms are willow-grass and spruce or fir, with swamps and bogs on south and west aspects of the area.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The natural integrity and appearance of the area have been impacted by jeep roads, mining activity, recreation developments, and range improvements. In general, however, these impacts have been minor and are localized.

B. OPPORTUNITIES FOR SOLITUDE

Topographic and vegetative screening and overall light use contribute to opportunities for solitude in this area. However, there is localized use by 4x4 vehicles and motorbikes in some parts of the roadless area.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities presently occurring are primarily hunting and hiking. Opportunities for hiking and hunting occur throughout the area. Most major streams in the area support fishable populations of trout.

D. OTHER FEATURES

Challenging experiences are mainly motorized in nature.

E. WILDERNESS MANAGEABILITY

The boundary of the Saginaw Creek Roadless Area is presently difficult to define on the ground with the exception of road #181 that parallels the western border. Boundary modifications to eliminate conflicting uses would dramatically reduce the size of the area, especially if the boundaries were located to be manageable.

1977 Inventory Acres:	26,200 gross	24,709 net
1983 Inventory Acres:	8,493 gross	8,493 net
Change	-17,707	-16,216

Reason for inventory change:

Timber sale and associated roads:	-17,408 gross	-17,408 net
Acre Recalculation:	- 299 gross	+ 1,192 net

III. AVAILABILITY

A. RESOURCE POTENTIALS

SAGINAW CREEK ROADLESS AREA
Area Descriptor: 1-004

CATEGORY	UNIT	VALUE
Gross Acres	acres	8493
Net Acres	acres	8493
Recreation		
Primitive	RVD'S	110
SPNM	RVD'S	161
SPM	RVD'S	159
Range		
Existing obligated suitable	Acres	1171
Allotments	# of	4
AUM'S	AUM'S	386
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	5143
Standing Volume	MBF	29,773
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	1602
Elk		
Winter Habitat	Acres	0

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	0
Significant Fisheries		
Stream miles	Miles	17.2
Stream Habitat	Acres	4.7
Lakes	# of	9
Lakes-Habitat	Acres	23
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	8493
Low	Acres	0
Claims	# of	0
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	8493
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	7338

1. Recreation

The Saginaw Creek area provides motorized recreation opportunities in summer and winter. Recreational use is primarily hunting, fishing, recreational driving and camping. Heavy use occurs on many undeveloped sites during hunting season, and in winter this area receives much activity from snow machines.

2. Wildlife
Summer forage and cover is provided throughout the area for black bear, mule deer, elk and moose. The wildlife habitats include moose winter range, elk calving and rutting areas, riparian zones, and upland game birds. Major streams support populations of trout, with brook trout the predominant species. There is no known occupied threatened and endangered species habitat in the area.

3. Water
The capacity of this unit to receive, store and produce water is fairly high and water quality is good; Saginaw Creek drainages serve as tributaries to the Big Hole River; Bloody Dick drainages feed Horse Prairie Creek which flows into Clark Canyon Reservoir.

4. Livestock Operations
Livestock operations include four grazing allotments on which three permittees are allocated approximately 390 AUM's. The area has approximately 28 miles of range fence and several developed springs.

5. Ecology
The area is predominantly representative of grass and grass/sagebrush steppes with seral lodgepole stands occurring at the higher elevations.

6. Timber
There is approximately 29.8 MMBF of standing volume on 5,000 acres of suitable timber land in the unit. Extensive stands of mature lodgepole pine occur on moderate sites.

7. Minerals/Oil and Gas
The geologic favorability for mineral and energy resources is moderate. Past mining activity has been limited. Most of the area is leased for oil and gas; no seismic exploration has occurred to date.

8. Cultural Resources
There are no known cultural or historic sites in this roadless area; however much of the area in the West Big Hole has a history of Indian use.

9. Land Use Authorizations
There are special use irrigation ditches in the roadless area.

10. Non-Federal Lands
There are no non-Federal lands.

B. MANAGEMENT CONSIDERATIONS

1. Fire
In denser timber areas with heavy downfall, a potential for fire does exist; however, fire occurrence has been low.

2. Insect and Disease
There is moderate-to-high risk for mountain pine beetle infestation in lodgepole pine.

IV. NEED

1. **Proximity to Other Designated Wilderness and to Population Centers.** The Saginaw Creek roadless area lies within 35 miles of the moderately-used Anaconda-Pintler Wilderness. Nearest population centers are Dillon, Montana (30 miles), Anaconda, Montana (80 miles), and Butte, Montana (100 miles). Missoula, Montana is 50 miles to the north.

2. **Contribution to the Wilderness Preservation System** This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes.

3. **Public interest** Interest in this area by proponents and the general public for inclusion into the wilderness system has been nominal. Public involvement meetings and scoping sessions for the Saginaw timber sale revealed no strong local desire to have this area designated as wilderness.

In RARE I the Saginaw Creek area was inventoried as essentially roadless. In 1977 the area was inventoried as roadless in the RARE II process. However, the wilderness potential of the area was evaluated in the Forest planning process that was taking place concurrently with RARE II. Based on direction established by the Forest's DEIS, the Saginaw Creek roadless area was dropped from further consideration in the RARE II and managed for nonwilderness uses. The area received little public support for wilderness designation during the planning process.

In 1983 the area was again inventoried as roadless in the Forest planning effort. Public comment on the "1983 Roadless Area Evaluation" brochure did not reflect any particular conflicts/interests in this roadless area.

In 1985 this area did not receive support for wilderness designation, except from those few commentors who requested wilderness designation for all roadless lands.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Saginaw Creek Roadless Area (1-004)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	0	0	0	0	0	8493	0	0
Group 2: (Timber)	3397	3312	3992	1104	3397	2293	4841	0	3992	2375
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	0	0	0	0	0	0	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	5096	5096	4501	7304	5096	6200	3567	0	4501	5402
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber):	0	85	0	85	0	0	85	0	0	716
TOTAL: 1-004	8493	8493	8493	8493	8493	8493	8493	8493	8493	8493

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	1932	2223	1693	0	2377	2856	1710	0	2753	1586
Decade 5 *	8493	8493	8493	0	8493	3443	8493	0	8493	8493
Roadless:										
Decade 1	6561	6270	6800	8493	6116	5637	6783	0	5740	6907
Decade 5 *	0	0	0	8493	0	5050	0	0	0	0
Wilderness:	0	0	0	0	0	0	0	8493	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Saginaw Creek Roadless Area 1-004 is designated wilderness in Alternative I only.

The wilderness qualities of the area would be maintained. Recreation use, primarily nonmotorized hunting and some fishing and hiking, would continue to occur.

The 5143 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 30 MMBF in standing volume, primarily extensive stands of mature lodgepole pine.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive managment that may result in reduced PNV (present net value).

Current livestock grazing, 386 AUM's, could continue on the portions of the four allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation may preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource. This could affect eventual livestock carrying capacity.

Wildlife habitats would not change much in the short-term period because existing forage and timber security levels would be maintained. Summer forage and cover for black bear, mule deer, elk and moose would continue to be provided.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances, and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity in the System.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality would be maintained at natural levels in the Saginaw & Bloody Dick drainages. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest, the related industries would not be supported by this emphasis. Timber supply, Forest-wide, would drop, particularly in Alternative I, resulting in a loss of jobs and income. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that use vehicles; however, the roadless setting and associated hunting quality would be retained.

Under wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Current information indicates no mining claims exist within this area. No impact on wilderness character from the exercise of valid existing rights is anticipated.

As of December, 1983, there were approximately 7338 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Saginaw Creek Roadless Area (1-004) are assigned these prescriptions in all Alternatives except I; from 13 percent in Alternative D to 57 percent in Alternative H.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal requires the construction of permanent roads and modifies the natural appearance of the area for approximately 25 to 40 years, (or until the regeneration is high enough to hide the scars and present the appearance of an old burn).

The attendant roads will eliminate the "roadless" nature within the emphasis, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.

In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.

Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation, primarily hunting. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphases: Range (No Timber, High Intensity Range and
   Low Intensity Wildlife

No alternatives considered assignment of any acres to these prescriptions in the Saginaw Creek Roadless Area.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Portions of the Saginaw Creek Roadless Area (1-004) are assigned to these prescriptions in all Alternatives but I; from 42 percent in Alternative H to 86 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing natural conditions. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive/semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly be affected.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
   Management Emphasis: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Less than one percent of the Saginaw Creek Roadless Area (1-004) is assigned to these prescriptions in Alternatives B, D and H. 8 percent of the Saginaw Creek Roadless Area is assigned to these prescriptions in Alternative S, the Proposed Action.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, and would have minor site specific impacts on the naturalness of the area.

Under the high-intensity range and high-intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

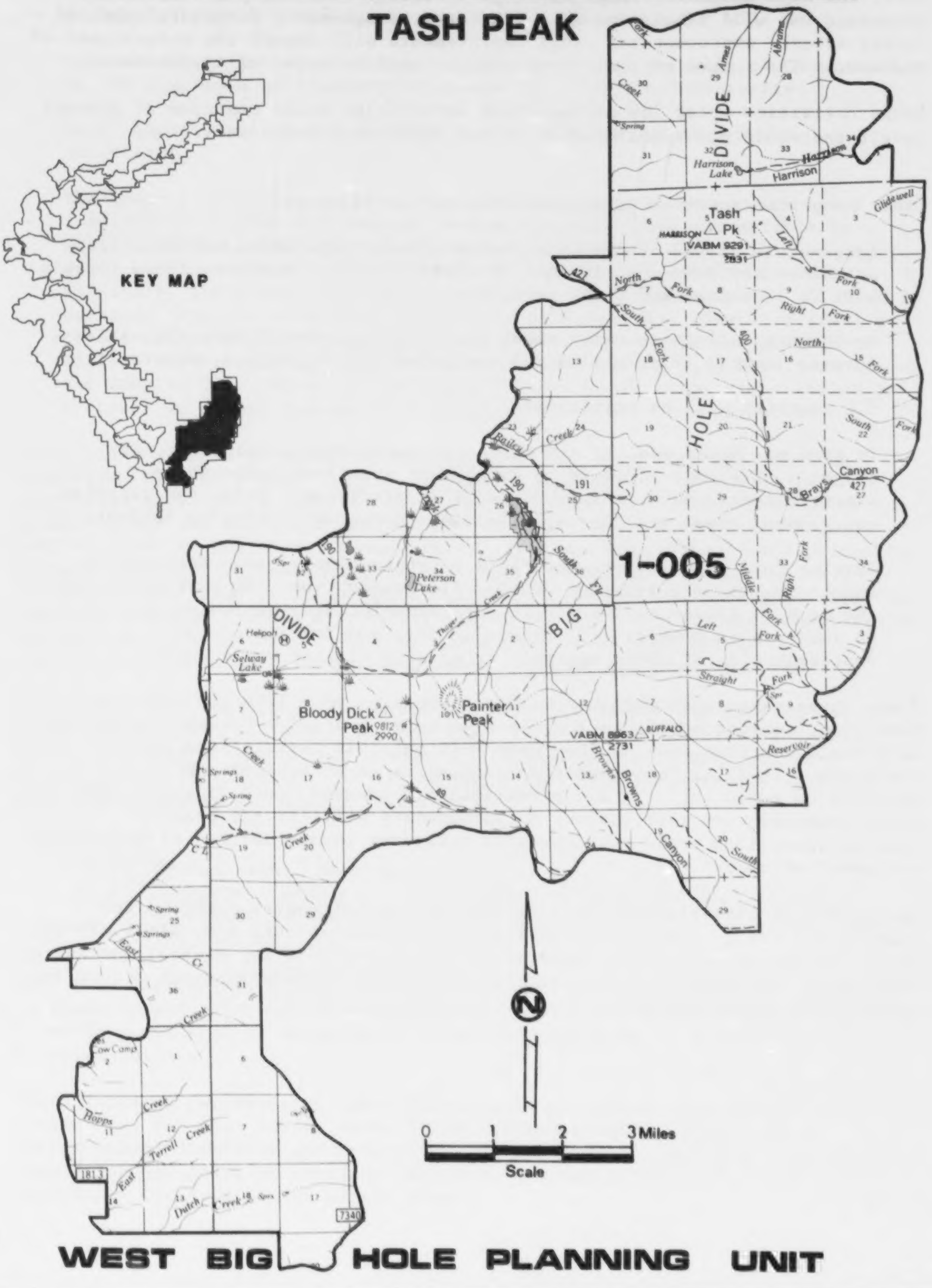
> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semiprimitive recreation opportunities.
>
> Elk security will be maintained.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment to prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

ROADLESS AREA 1-005

TASH PEAK


KEY MAP
1-005
Tash Pk
HARRISON
VABM 9291
2831
Harrison Lake
Harrison
DIVIDE
HOLE
BIG
DIVIDE
North Fork
South Fork
Right Fork
Left Fork
Glidewell
Bailey Creek
Brays Canyon
427
400
191
190
Peterson Lake
Selway Lake
Helispot
Bloody Dick Peak 9812 2990
Painter Peak
VABM 8963
BUFFALO
2731
Browns Canyon
Middle Fork
Straight Fork
Reservoir
Thayer Creek
Cow Camp
Hopps Creek
Terrell Creek
Dutch Creek
East Creek
181.3
7340
0 1 2 3 Miles
Scale
N

WEST BIG HOLE PLANNING UNIT

APPENDIX C- ROADLESS AREA EVALUATION
Beaverhead National Forest

	Gross Acres	Net Acres
Roadless Area Name 1-005 Tash Peak		
Number of Acres:	62,254	62,094

I. DESCRIPTION

The Tash Peak Roadless Area is located southwest of Dillon, Montana, accessed from gravel or dirt roads off the county road between Dillon and Jackson in the Horse Prairie vicinity. It extends from the Forest boundary near East Terrell Creek on the south, and to Ames and Abrams Creeks on the north. The general aspect of this large roadless area (62,094 acres) is northwest in the West Big Hole Planning Unit. The Big Hole Divide cuts this unit into east and west halves. The eastern side of the divide is a broad, rounded, gently sloping ridge. Long, smooth slopes break sharply to steep, rocky slopes along most of the Forest boundary. Lower elevation footslopes are long and gentle at the north end and moderately steep on the south end. The west side of the Big Hole Divide, with the exception of steep terrain around Bloody Dick Peak (9,800 ft.) and steep, rugged canyons at the head of Fox Creek, is rolling and slopes to 6,800 feet in Browns Canyon.

Rock and sandy loams derived from metamorphic rocks dominate the area, but slopes north of the canyon region have very rocky, sandy loams.

Vegetation on lower slopes is grassland; lodgepole pine and subalpine fir forest dominate mid elevations, while whitebark pine grows at higher elevations.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Timber sales adjacent to the roadless area boundary are visible from some portions of the roadless area. Jeep trails and range developments provide additional visual impacts. However, topographic and vegetative screening mitigate many of these impacts. The Big Hole Divide runs from northeast to southwest, roughly splitting the area in half north to south. The size of the area, as delineated, is adequate for wilderness, but existing developments and roads on three sides of the area are visible from within. The surrounding rural areas, however, are sparsely populated or are adjacent National Forest or Bureau of Land Management lands. The only private land in the area is the homestead entry (160 acres) in Thayer Creek.

B. OPPORTUNITIES FOR SOLITUDE

The large size and light use of this area affords some opportunities for solitude, despite the existing intrusions. Topographic and vegetative screening provide opportunities for a number of individuals to experience relatively unimpacted use at once.

C. PRIMITIVE RECREATION OPPORTUNITIES

Possible primitive recreation opportunities include nonmotorized hunting and fishing, some hiking, and cross-country skiing. Present snowmobile use impacts cross-country skiing opportunities to a slight degree.

D. OTHER FEATURES

The only stand of ponderosa pine in the Bloody Dick area occurs in this roadless area. The area offers panoramic views of adjacent valleys.

E. MANAGEABILITY AND BOUNDARIES

Boundary modification to exclude motorized uses and to achieve manageability of the boundary would be adjacent to private and BLM ground on the east and west and would require extensive posting.

1977 Inventory Acres:	71,900 gross	71,740 net
1983 Inventory Acres:	62,254	62,094
Change	- 9646	- 9646

Reasons for inventoried acres change:		
Timber Sale and roads	-10,143	-10,143
Acre Recalculation	+ 497	+ 497

III. AVAILABILITY

A. RESOURCE POTENTIALS

TASH PEAK ROADLESS AREA
Area Descriptor: 1-005

CATEGORY	UNIT	VALUE
Gross Acres	Acres	62,254
Net Acres	Acres	62,094
Recreation		
Primitive	RVD'S	783
SPNM	RVD'S	1141
SPM	RVD'S	1129
Range		
Existing obligated suitable	Acres	12,058
Allotments	# of	9
AUM's	AUM's	4487
Existing vacant	# of	9
suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	41,155
Standing Volume	MBF	233,638
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	265
Significant Fisheries		
Stream Miles	Miles	98.0
Stream Habitat	Acres	34.8
Lakes	# of	5
Lakes, Habitat	Acres	16
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	62,094
Low	Acres	0
Claims	# of	9
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	62,094
Low	Acres	0

(Resource Potential, continued)

Big Game			Oil and Gas Leases		
Winter Habitat	Acres	6889	Leased Area	Acres	61,579
Elk					
Winter Habitat	Acres	3391			

---

1. Recreation

Current uses include fishing, hunting, prospecting, and sightseeing. There are no developed sites, but low standard roads provide use from motorized vehicles. The area offers panoramic views of adjacent valleys.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, and black bear. Sporadic gray wolf activity (an endangered species) was recorded for the area in the 1970's and 1980's. Upland game birds, such as ruffled, spruce, and blue grouse are also found in the unit. Except for the gray wolf, no threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk. Furbearers such as bobcat and wolverine are found in the area.

Fisheries are found in many of the lakes, especially in Peterson Lakes, which support fishable populations of trout. Harrison Lake receives little use.

3. Water

The capacity of this unit to receive, store and produce water is fairly high; water turbidity is low. The unit is headwaters for streams that flow into the Big Hole River and Grasshopper and Bloody Dick Peaks.

4. Livestock Operations

Nearly all suitable range is grazed by cattle from mid-June through mid-October under portions on nine grazing allotments. Allotments are under intensive grazing management systems, with substantial range improvement developments present.

5. Ecology

The area is predominantly representative of grassland and grass/sagebrush steppes with seral lodgepole stands occurring at the higher elevations.

6. Timber

There is approximately 234 MMBF of standing volume on 41,000 acres of tentatively suitable timber land in the unit.

7. Minerals/Oil and Gas

Most of the area is leased for oil and gas. Mining activity at scattered hardrock prospects has been limited. The geologic favorability for mineral and energy resources is moderate.

8. Cultural Resources

The potential for prehistoric asnd historic cultural resources is unknown; however, past Indian use of the general area suggests that sites may exist. The historic Lewis and Clark Trail crosses near the extreme northern portion of the unit.

9. Land Use Authorizations

There are no land use authorizations in this roadless area.

10. Non-Federal Land

There are 160 acres on non-Federal land.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

A potential exists for large fires in the heavier timber areas because of heavy downfall.

2. Insect and Disease

Mountain pine beetle infestation presents a moderate-to-high risk in lodgepole pine stands.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers

The closest wilderness is the moderately-used Anaconda-Pintler which is 35 miles to the north. The area is quite far from major population centers. The closest centers with populations over 30,000 are Butte and Bozeman, Montana, and Idaho Falls, Idaho.

2. Contribution to the Wilderness Preservation System

This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grassland and grass/sagebrush steppes with moderate topographical relief.

3. Public Interest

In RARE I two portions of the Tash Peak Roadless Area were inventoried as roadless and the remainder was inventoried as essentially roadless. The Tash Peak area was not chosen as a wilderness candidate and was administered under other resource management. The 1978 Beaverhead Proposed Land Management Plan allocated the lands to a mix of wildlife, recreation, range, and timber management. These allocations were refined in response to public comment on the Draft Plan, but the emphases remained essentially the same in the 1978 Forest Plan. In 1977 these lands were again identified as roadless in the RARE II process. However, the lands were dropped from further wilderness consideration as a result of the Forest planning process.

In 1983 the area was inventoried as roadless in the current Forest planning effort. Public comment on the "1983 Roadless Area Evaluation" brochure did not reflect any particular conflicts/interests in this roadless area. Three respondents supported wilderness in the area, basing their concerns on "excellent wilderness and wildlife values."

In 1985 wilderness designation of this area was supported only by those few respondents who supported wilderness designation for all roadless areas.

A portion of this area was recommended for "special management consideration" by those who supported the "Conservationist Alternative." They asked that the "South Big Hole", an area of approximately 17,200 acres surrounding Peterson Lake and stretching northward to encompass the Thayer, Bailey, and Fox Creeks drainages, be assigned recreation management emphasis, be removed from the suitable timber base, and preclude any new road construction or reconstruction. Commentors voiced concern for primitive recreation, scenic, wildlife, and water quality values. They were particularly concerned about potential logging in the vicinity of Peterson Lake.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Tash Peak Roadless Area (1-005)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	0	0	0	0	0	62,094	0	0
Group 2: (Timber)	31,008	22,932	27,902	2700	26,659	9266	11,129	0	34,114	14,532
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	1863	0	0	0	1242	621	0	0	2010
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	31,086	34,787	33,544	59,394	33,544	49,695	48,453	0	27,359	40,179
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	2512	648	0	1891	1891	1891	0	621	5373
TOTAL:	62,094	62,094	62,094	62,094	62,094	62,094	62,094	62,094	62,094	62,094

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	11,881	19,794	41,103	0	20,257	34,820	10,508	0	41,026	10,545
Decade 5 *	44,567	41,177	44,567	0	45,127	35,467	25,887	0	45,127	25,864
Roadless:										
Decade 1	50,213	42,300	20,991	62,094	41,837	27,274	51,586	0	21,068	51,549
Decade 5 *	17,527	20,917	17,527	62,094	16,967	26,627	36,207	0	16,967	36,230
Wilderness:	0	0	0	0	0	0	0	62,094	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Tash Peak Roadless Area (1-005) is designated wilderness in Alternative I only.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing jeep trails in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without motorized use, these trails would be naturally narrowed in time.

The 41,155 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 234 MMBF in standing volume and would be primarily the lodgepole pine and subalpine fir stands along the midslope of the Big Hole Divide.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 4487 AUM's, could continue on the portions of the nine allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained. Elk winter ranges, 3391 acres, would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

Visual quality would be retained and, over time, improved as jeep trails and other impacts disappear. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.

Wilderness designation would increase the land base in the Wilderness Preservation System, provide representations of grassland and grass/sagebrush steppes in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate. Security and the prey base for the transitory gray wolf would also be maintained.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be maintained in a roadless setting although without vehicle access, some conveniences would be lost.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 9 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximatelely 61,579 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severly impact the wilderness character of the area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Tash Peak Roadless Area (1-005) are assigned to these prescriptions in all Alternatives except I; between 4 and 23 percent of the area is assigned in Alternatives D, G, H and S; from 37 to 55 percent of the area is assigned in Alternatives A, B, C, F and W.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area. Access into the area will be primarily along the periphery of the area, the northside, westside drainages, and to a lesser extent along the castside.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.

The opportunities for primitive and semi-primitive recreation will be severely reduced or eliminated around the periphery of the area. Fishing, hunting, prospecting, and sightseeing could continue but move within a roaded natural setting.

Elk security will be reduced in the short-term if existing stands are harvested. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area. Correspondingly, the transitory gray wolf would be affected by alteration in its prey base and by an increase in human activity resulting from an increase in road access.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area could be adversely affected by the increase in roading and by fluctuations in big game populations. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Only a small portion of the Tash Peak Roadless Area (1-005) is assigned to these prescriptions in Alternatives B, G, H and S. The acreages are in scattered parcels along the periphery of the area.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, acreages in these prescriptions are scattered and relatively small sites.
>
> Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities could change some, primarily because of the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of resource management would generally be unaffected.

Assignment to prescription 15-24 would not restrict access for mineral and energy resources. Assignment to prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive
Recreation/Custodial

More than 40 percent of the Tash Peak Roadless Area (1-005) is assigned to these prescriptions in all Alternatives but I. The acreage across alternatives is usually in consolidated blocks along the Big Hole Divide.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly be affected.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing conditions, current public uses would also be maintained. A variety of recreation experiences would be available including primitive and semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support an outfitter and guide operation. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment to prescription 1-1 would not restrict access for mineral and energy resources. Assignment to prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment to prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management emphasis: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Small portions of the Tash Peak Roadless Area (1-005) are assigned to these prescriptions in all Alternatives except A, D and I; from 1 percent in Alternative W to 9 percent in Alternative S, the Proposed Action. The acreages are scattered pieces along the periphery of the area or within several drainages in the southwest part of the divide.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term and localized. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphasis maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment to prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment to prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

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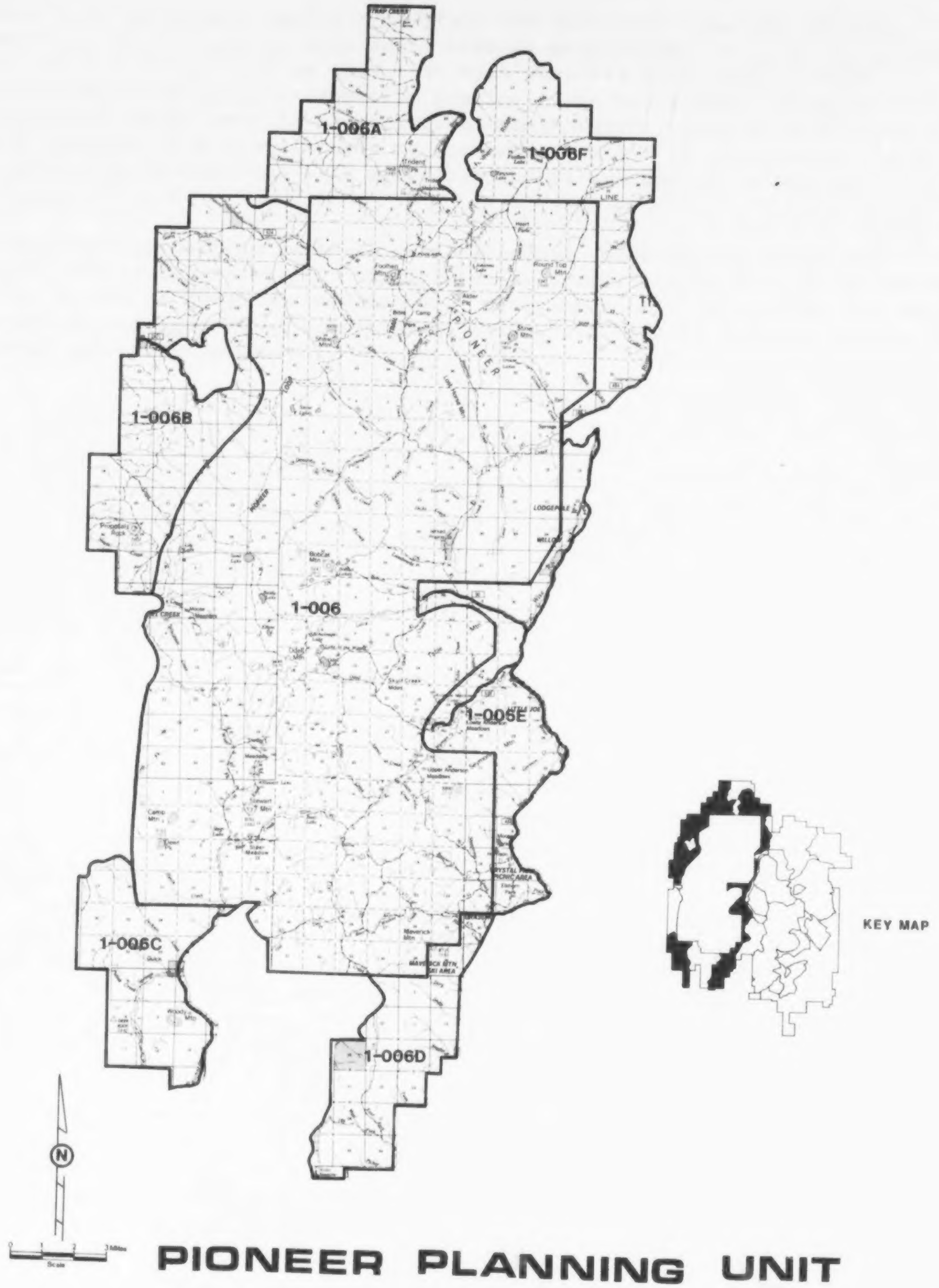
ROADLESS AREA 1-006

WEST PIONEER


1-006A
1-006F
1-006B
1-006
1-006E
1-006C
1-006D
PIONEER
Foolhen Mtn
Round Top Mtn
Bobcat Mtn
Maverick Mtn
LODGEPOLE
KEY MAP
N
Scale
Miles

PIONEER PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-006 West Pioneer

Number of Acres:		Gross Acres	Net Acres
	1-006A	12,806	12,806
	1-006B	25,264	25,064
	1-006C	12,142	11,982
	1-006D	11,382	10,702
	1-006E	11,765	11,765
	1-006F	18,213	18,213
	Total	91,572	90,532

I. DESCRIPTION

Area 1-006 of the West Pioneers consists of upper to middle elevation lands east of the crest of the Pioneer Mountains in the Pioneer Planning Unit. Areas 1-006A through 1-006F surround the perimeter of the West Pioneer Wilderness Study Area 1-006. Area 1-006A is located on the northwest border of MWSA 1-006, with Calvert Hill and Bryant Creek on the eastern edge, and separated from 1-006B by Squaw Creek.

Area 1-006B is located on the west edge of MWSA 1-006 and east of Highway 43 from Wisdom to Wise River, on the lower slopes of the Pioneer Mountains. Squaw Creek is the northern boundary and Steele Creek separates the area from 1-006C. It is easily accessed from Highway #43. Doolittle and McVey Creeks are the major drainages, emptying into the Big Hole River.

Area 1-006C occupies a southern position from the MWSA on the southwest corner of the Pioneer Planning Unit and is east of Highway #278 from Wisdom to Dillon. It lies south of Deer Peak and north of Butch Hill. Warm Springs Creek runs through the middle of the area. Access is available from the Warm Springs Creek road or by entering east through private land from Highway #278.

Area 1-006E separates from 1-006D at Grasshopper Creek on the south and extends northward for approximately 17 miles to Pattengail Creek. The entire unit is extremely long and narrow. Wise River flows along its eastern edge.

Area 1-006F surrounds the extreme northeast corner of 1-006 and contains 18,213 acres. Foolhen and Meadow Creek are the principal streams. Wise River borders the northeast edge, and the area is easily reached by Highways #43 and #484.

The areas that surround the West Pioneer Wilderness Study Area have highly dissected, diverse physiography and will be discussed according to their respective locations. The general topography, however, consists mainly of foothills surrounding the West Pioneer Mountain Range; numerous rock outcroppings and associated talus slopes. Small, rocky, glacial trough valleys occur intermittently with deep V and U-shaped canyons.

Area 1-006A has a well-developed drainage pattern. Although a few gently sloping benches, ridges, and basins occur at lower elevations, moderately steep, well-dissected sideslopes of V-shaped valleys dominate the landscape. A high ridge forms the eastern boundary with elevations that do not exceed

9,100 feet. Soils are predominantly loamy sands derived from granitic rock, but soil depth and rockiness varies considerably with landscape position and from drainage to drainage. Generally, deep productive sandy loams occupy gentle north-facing slopes at lower elevations and shallow, rocky, coarse sands occur on the steeper slopes. Proposal Rock is particularly scenic. The 25 to 30 inches of yearly precipitation falls primarily as snow.

Vegetation is predominantly forest with large grassland parks and benches at lower elevations. Lower reaches of major streams contain broad willow bottoms. Lodgepole pine is the dominant species, with Douglas-fir on drier, low-elevation sites. Engelmann spruce and subalpine fir grow where there is more moisture.

Area 1-006B, located south of 1-006A, contains similar physical characteristics; a highly diverse physiography with deep V canyons. Elevations range from 6,000 feet on the lower eastern boundary to over 8,000 feet on the west side. Two steep glacial trough valleys occur in the headwaters of Steel Creek. The landscape contains lodgepole pine, with some scattered patches of aspen. Open parks contain bunchgrass and sage. Wet meadow bottoms are sedge-covered. The area also receives a large amount of snow--70 percent of the total 25-30 inches.

The western part of Roadless Area 1-006C contains the foothills and southern crest of the West Pioneer Mountains. Narrow ridge tops, valley bottoms and steep sideslopes of V-shaped valleys comprise the bulk of the area. West of Warm Springs Creek, the unit contains gently sloping moraines bounded by a rounded, rocky ridge. Butch Hill is the highest point, rising to 8,155 feet.

Vegetative cover is mostly grass, especially on the southwest slopes at lower elevations. Douglas-fir grows on slopes in the southwest corner. Engelmann spruce is also common at moist, low elevations. Lodgepole pine is gradually replaced with whitebark pine and subalpine fir at higher elevations.

Area 1-006D is characterized by rolling, mid-elevation hills and broad basins. The major drainage in the area is Old Tim Creek.

Soils are shallow, rocky, loamy coarse sands on the uplands and deep, poorly-drained sands and loams in the interspersed stringer meadows. The area is predominantly forest with lodgepole pine as the major species. Sagebrush/grasslands cover the lower elevation slopes.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Areas 1-006A through F are independently small and narrow and include many low-standard jeep roads.

Man's impact is felt in area 1-006A. Highway 43 to the west is visible from some viewpoints and the traffic noise generated can be heard in the roadless area. A portion of the Calvert Hill tungsten mine claim group is located in the unit.

Area 1-006B is bordered by the Steele-Fox timber sale. Mineral activity in this area could impact the natural appearance and integrity of this unit, since exploration for heavy metals has increased over the last two years.

Timber sales surrounding area 1-006C adversely affect the natural integrity. Mineral activity (including exploration drilling) could impact the natural appearance and integrity of this area.

Clear cuts of the ski hill are apparent from parts of area 1-006D. This roadless region is impacted by considerable traffic on the Wise River-Polaris road on its eastern boundary. The Lacy and Wyman Creek timber sales and subsequent roads are planned for this area in 1986. Mineral activity (including exploration drilling) could impact the natural appearance and integrity of this area.

Area 1-006E contains several recreation and snowmobile trails and is adjacent to three campgrounds. There is heavy motorized use in parts of the roadless area. Snowmobile use is especially popular. Small post cuts occur along Lacy Creek and the Wise River road south of Pattengail Creek. The southeast corner of this area has a natural warm spring. Mineral activity (including exploration drilling) could impact the natural appearance and integrity of this area.

Area 1-006F contains a large, roaded, cutover area in Alder Creek approximately ten years old. It also receives heavy and widespread hunting pressure for elk.

B. OPPORTUNITIES

Area 1-006A offers good opportunities for solitude. Opportunities for solitude in 1-006D, E, and F are impacted by traffic sights and sounds from highways and roads near the units. The Bull Creek timber sale on the north and west sides, ski run clearings from Maverick Mountain Ski Area, and roads and development in the upper Grasshopper drainage diminish opportunities for solitude. In area 1-006D the Pole Creek drainage which runs north to south through the unit provides opportunities for solitude in this area.

There are also some opportunities for solitude in area 1-006F, especially around Foolhen and Ferguson Lakes. Opportunities are poor in the Alder Creek area because of tree planting, firewood cutting, and other management activities.

Solitude is more available in some parts of the areas than in others. Popular trails, including a National Recreation Trail and a snowmobile trail, penetrate these areas in the eastern portion. Noises and sights of human activities outside the area are hard to avoid since 1-006E and 1-006F are extremely narrow and separated from 1-008A by Highway #484.

C. PRIMITIVE RECREATION OPPORTUNITIES

There are few attractions in Area 1-006A. Trails are available for hiking, but are used mainly by cattle permittees and hunters. Jeep trails are heavily used during hunting season.

If combined with portions of the West Pioneer Montana Wilderness Act Study Area, the primitive recreation opportunities would be enhanced.

Area 1-006D has a trail that runs up the bottom of Pole Creek that would provide a primitive recreation setting. In Area 1-006E most recreational activities are in developed campgrounds or are dispersed activities such as snowmobiling, hunting or fishing.

D. OTHER FEATURES

This is a particularly scenic area, with many opportunities for recreational enjoyment.

E. MANAGEABILITY AND BOUNDARIES

Wilderness manageability in all 1-006 areas is significantly complicated by the nonwilderness recommendation for the West Pioneer Montana Wilderness Act Study Area. However, 1-006A through 1-006E have boundaries that are sufficiently manageable as they now exist.

An island excluded from 1-006B in Doolittle Creek presents a boundary manageability conflict, but this intrusion could be mitigated. If 1-006 were combined with 1-006D, 1-006D could be managed for wilderness, although the wilderness values of this area at this time are relatively low to moderate. The east boundary of area 1-006F would be more manageable if it was located on the west side of Alder Creek to exclude the Alder Creek timber sale.

Solid National Forest ownership of this roadless area would facilitate manageability, since some of the area has been subdivided into summer home lots.

1977 Inventory Acres:	108,289 gross	106,789 net
1983 Inventory Acres:	91,572	90,532
Change	- 16,717	- 16,257

Reason for change in inventoried acres:

Existing Timber Sales and roads	- 2119	- 2119
Acreage Recalculation	- 14,598	- 14,138

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-006A VALUE	1-006B VALUE	1-006C VALUE	1-006D VALUE	1-006E VALUE	1-006F VALUE	COMBINED VALUE
Acres								
Gross	Acres	12,806	25,264	12,142	11,382	11,765	18,213	91,572
Net	Acres	12,806	25,064	11,982	10,702	11,765	18,213	90,532
Recreation								
Primitive	RVD's	162	316	151	135	151	230	1145
SPNM	RVD's	236	461	220	197	220	335	1669
SPM	RVD's	233	456	218	195	218	331	1651
Range								
Existing obligated suitable	Acres	3652	9026	2139	1198	3312	759	20,086
Allotments	# of	2	3	5	4	3	1	17*
AUM's	AUM's	1611	3585	938	620	1532	352	8638
Existing vacant suitable	Acres	0	0	0	0	0	0	0
Allotments	# of	0	0	0	0	0	0	0
Timber								
Tentative suitable	Acres	9652	16,556	9291	9216	8179	15,951	68,845
Standing Volume	MBF	56,777	95,872	54,117	51,489	48,478	87,000	393,733
Corridors								
Existing/Potential	# of	0	0	0	0	0	0	0
Wildlife T&E								
Bald Eagle	Acres	0	0	0	0	0	0	0
Big Game								
Winter Habitat	Acres	4723	13,845	0	1349	1516	2294	23,727
Elk								
Winter Habitat	Acres	3797	11,693	0	1349	52	0	16,891
Deer								
Winter Habitat	Acres	0	0	0	0	0	0	0
Significant Fisheries								
Stream Miles	Miles	15.0	31.7	15.0	12.2	30.8	20.2	124.9
Stream Habitat	Acres	9.6	24.9	7.0	2.2	44.9	15.3	103.9
Lakes	# of	1	2	0	0	4	6	13
Lake Habitat	Acres	1	4	0	0	10	30	45
Water Developments								
Existing	# of	0	0	0	0	0	0	0
Minerals								
Very High	Acres	8964	17,545	11,982	10,702	11,765	9107	70,065
High	Acres	3842	7519	0	0	0	9106	20,467
Moderate	Acres	0	0	0	0	0	0	0
Low	Acres	0	0	0	0	0	0	0
Claims	# of	0	7	26	54	202	0	289
Oil and Gas Potential								
Very High	Acres	0	0	0	0	0	0	0
High	Acres	0	0	0	0	0	0	0
Moderate	Acres	12,806	25,064	11,982	10,702	11,765	18,213	90,532
Low	Acres	0	0	0	0	0	0	0
Oil and Gas Leases								
Leased area	Acres	10,247	22,344	10,972	10,582	9383	15,903	79,431

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* Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of areas.

1. Recreation

Area 1-006A has no developed recreational facilities. Dispersed recreation use is moderate and big game hunting is the principal activity.

Area 1-006B--hunting is the main recreational use, but the area also serves backpackers heading for lakes in adjacent units. The small campground deleted from the roadless area at Steel Creek is a popular picnic area in the summer and is used by hunters in the fall; it is just outside the boundary on the south.

Area 1-006C receives heavy use from hunter traffic and also provides access for backpackers and hikers into more primitive regions in 1-006.

Area 1-006D is valued by the public for its recreational use because of the close proximity to Maverick Mountain Ski Area, a hot springs resort, campground, a public digging site for quartz crystal and a historic ghost town and mine.

Area 1-006E is popular for snowmobiling and cycling on many of its trails and meadows. There are four developed campgrounds along the Wise River drainage area, creating heavy dispersed recreation here.

Area 1-006F receives heavy and widespread hunting pressure, mostly for elk. There are no developed recreational areas. Foolhen and Ferguson Lakes are fished by backpackers and trails are used by a few motorbike recreationists.

2. Wildlife

Area 1-006A has a combination of wildlife habitats. Summer forage and cover is provided throughout for deer, elk and moose. The wildlife habitats include moose winter range, elk calving and rutting areas, limited elk winter range, elk wallow, cliffs, and riparian zones. Mountain goats inhabit the most rugged terrain along the West Pioneer Divide. Big game winter range is provided on the area at lower elevations, but most key winter range is on private land in the Big Hole Valley. Antelope are seen infrequently in the unit, but small herds on adjacent private lands appear to be increasing. Most streams are spawning grounds for the Big Hole River.

Area 1-006B has mule deer, elk, moose, mountain goat, a limited number of antelope and upland game birds, furbearers and other small mammals and birds common to western Montana. Forest lands provide important elk winter cover and summer-fall sanctuaries.

Area 1-006C lower elevation slopes provide winter range. Moose winter in the larger stream bottoms. Elk and deer summer throughout the area.

Area 1-006D lower elevation slopes provide winter range. Moose winter in the larger stream bottoms. Elk and deer summer throughout the area.

Area 1-006E contains important moose range and elk summer range. Most main streams are important spawning areas for fish from the Big Hole River.

Area 1-006F provides elk and mule deer summer range. A few deer and elk winter on the southeast-facing slopes at the mouth of Bryant Creek. Ferguson and Foolhen Lakes support populations of rainbow trout and are fished during the summer months.

3. Water

Areas 1-006A through 1-006D have a fairly high capacity to receive, store, and produce water. Natural turbidity is low.

Area 1-006E--water from the lower portions of Elkhorn Creek is contaminated by drainage from the Elkhorn Mine.

Area 1-006F includes two lakes that occur in the Alder Creek drainage; Foolhen has 10 surface acres, while Ferguson has 16.

4. Livestock Operations

Area 1-006A--incidental grassland here is open sage and grass at lower elevations, complemented by scattered moist bottomlands and grass stringers. Summer grazing occurs between late June and mid-October in two grazing allotments--Calvert Hill #34 and Toomey Creek #52.

Area 1-006B grassland characteristics are very similar to 1-006A. It has portions of three allotments that have combined numbers of 913 cow/calf pairs, 18 springs and 29.8 miles of fence. Included allotments are Papoose #212, Doolittle #57, and North Steele #66.

Area 1-006C contains five allotments that have combined numbers of 710 cow/calf pairs, 40 horses, 29.11 miles of fence and seven springs. Sagebursh treatments have occurred. Warm Springs #258, Dry Range #58, Fox Gulch #60, Sheep Creek #71, and Cox Ranch #56 are the available allotments. These allotments also provide dual cattle and elk use. Range is open sage and grassland at lower elevations, complemented by scattered moist bottomlands and grass stringers.

Area 1-006D--primary range is open grasslands at lower elevations and narrow wet meadows at higher elevations. Cattle graze the area from late June through September in Pole Creek #43, Snyder Creek #27, Dory Creek #16, and Grasshopper #6.

Area 1-006E--outside of the meadows in Anderson Meadows, the majority of the range is scattered parks and open timbered areas. Grasshopper #6, Anderson Meadows #37 and Jerked Prairie #211 are allotments that are within this area. The Anderson Meadows Cow Camp is also located here.

Area 1-006F rangeland is open grassland and sagebrush-grassland at lower elevations, complemented by meadows and grassland stringers at high elevations. Only one-fourth of this area is grazed under the Meadow Creek allotment #45.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from

80 to 250 years. Engelmann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber

Area 1-006A has large volumes of timber with average to above average timber growing sites on lower and middle elevations. Timber harvesting on National Forest lands are scheduled in the next five years in 1-006A, 1-006E, and 1-006F. Some scattered post and pole cuts occur in 1-006A.

Area 1-006B--most of the timberland here is comprised of overmature lodgepole pine and Douglas-fir. Intensive timber management has been limited to Doolittle Creek plus some scattered post and pole cutting. Minor volumes of timber have been harvested by selective cut in the Steele Creek drainage. Scattered post and pole cutting has occurred adjacent to private land. Vegetation here is predominantly forest with lodgepole pine the dominant timber species; Douglas-fir grows on drier and low elevation sites, and Engelmann spruce and subalpine fir on the wetter sites.

Area 1-006C--Douglas-fir grows on many slopes in the southwest corner.

Area 1-006D has had no timber harvesting internally, but there has been cutting in the Bull Creek and Hot Springs drainages which abut the area. Lodgepole pine is the dominant tree species, but Engelmann spruce is common on moist, lower elevation slopes.

Area 1-006E is mostly unsuitable for timber management. On the south end of this unit, vegetation is only about one-third forest.

Area 1-006F--extensive timber management has taken place adjacent to this unit since the 1960's. Lodgepole pine is the major species on about two-thirds of this forested land.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is very high for approximately 80 percent of the area and high for approximately 20 percent of the area. Extensive mining activity and interest over much of the area is evident. Exploration drilling for molybdenum and tungsten is occurring, has occurred, or is planned at several locations. A past producing tungsten mine is located adjacent to 1-006A at Calvert Hill. Geologic favorability for oil and gas is moderate. Oil and gas leases have been issued for most acres outside the West Pioneer MWSA area.

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown. However, past Indian use of the West Big Hole and Pioneer Mountain areas suggests that undiscovered sites may exist.

9. Land Use Authorizations

There are no land use authorizations in the roadless units.

10. Non-Federal Lands
Area 1-006B contains 200 private acres. There are 160 acres of private land in 1-006C; 680 acres of private land in 1-006D.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire occurrence is low but could be expected to be periodically catastrophic in lodgepole pine ecosystems where there is heavy downfall.

2. Insect and Disease
Mountain pine beetle risk rating varies from moderate to high and is presently endemic and sporadic. There is a current infestation of spruce budworm in Douglas-fir at lower elevations in area 1-006F.

IV. NEED

1. Proximity to Other Designated Wilderness and Population Centers
The Anaconda-Pintler Wilderness is within 15 miles of areas 1-006A and 1-006F, and 30 miles from areas in the southern extremities of 1-006. This wilderness receives moderate use. Population centers within short distances are Butte (80 miles), and Anaconda (50 miles).

2. Contribution to Wilderness Preservation System
West Pioneer areas 1-006A through 1-006F are extensions of the West Pioneer MWSA topographically and from an ecosystem standpoint. The area provides occupied black bear, moose, wolverine, and Arctic grayling habitat as well as more common big game animals. The area, if designated wilderness, would enhance the existing Wilderness Study Area by giving it more depth in wilderness resources and attributes. If the area were classified as wilderness, resource conflicts would be mineral and energy resources, timber management and recreation management, precluding the use of motorized vehicles in all seasons. The infestation of spruce budworm would result in the epidemic running its natural cycle.

3. Public Interest
In RARE I, four portions of the West Pioneer Mountain Range (#41 - Bobcat Mountain, #42 - Odell Mountain, #43 - Deer Peak and #32 - Rainy Mountain) were identified as roadless; most of the remainder of the area was identified as essentially roadless. These areas showed little evidence of intensive management and, as a result, were again identified for further study in the RARE II process. The 1977 Beaverhead National Forest Draft Land and Resource Management Plan proposed approximately 93,400 acres in the West Pioneers for wilderness study. Public comment on the Draft Plan indicated strong support for wilderness designation of the study area. Before the Forest Plan or RARE II were finalized, a portion of the West Pioneers was proposed for Wilderness Study in Senate Bill 393 and, later, through the Montana Wilderness Study Act of 1977 (P.L. 95-150). This law directed the Secretary of Agriculture to study the identified area for possible inclusion into the Wilderness Preservation System.

In 1978, with the signing of the Beaverhead Forest Plan, all roadless lands in the West Pioneers - other than those identified in the study area - were released from further study in RARE II and assigned nonwilderness management emphases. A decision as to the status of the study area - wilderness or nonwilderness management - is awaiting Congressional action on the Montana Wilderness Study Act Final EIS.

In 1982 the Forest again identified roadless lands (outside the MWSA area) in the West Pioneers for wilderness reevaluation in the Forest Plan. In the 1985 Revised Draft EIS, Proposed Action (Alternative H), none of these lands were recommended for wilderness designation.

Many of those who commented on the 1985 Proposed Forest Plan strongly supported wilderness designation of the MWSA area, even though the wilderness decision for this area will not be made in the Forest Plan. Those who expressed support for the "Conservationist Alternative" and others who expressed other "environmentalist" viewpoints were particularly interested in seeing wilderness designation for this area. Timber industry and energy and nonenergy industries representatives generally opposed further wilderness designation, including designation of this area.

In general, the public did not support wilderness for the surrounding portions (A-F1-006) of the West Pioneers Roadless Area. Some commentors expressed interest in having the areas remain roadless and free of timber sale activities.

The "Conservationist Alternative" highlighted an area (referred to as Toomey/Sawlog) in the northwestern corner of the West Pioneers for "sensitive management." This area comprises approximately 12,100 acres and includes a small portion of area B1-008 and a substantial portion of A1-008. The Conservationist Alternative does not propose management emphases different from those in the Proposed Plan but asks that the area be removed from the timber base and retained as roadless. This Alternative was supported by many commentors.

Other commentors expressed concern about timber sales in the West Pioneers in general, because of potential impacts to water quality, downstream fisheries, municipal watershed (Big Hole River), elk security, and/or habitat for producing or maintaining the West Pioneer elk herd or "trophy bulls."

Timber industry, on the other hand, expressed interest in being able to log in various portions of the West Pioneers and in retaining "suitable" lands in the timber base.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the West Pioneer Roadless Area (1-006)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1:1/1-006A	0	0	0	0	0	0	0	12,806	0	0
1-006B	0	0	0	0	0	0	0	25,064	0	0
1-006C	0	0	0	0	0	0	0	11,982	0	0
1-006D	0	0	0	0	0	0	0	10,702	0	0
1-006E	0	0	0	0	0	0	0	11,765	0	0
1-006F	0	0	0	0	0	0	0	18,213	0	0
Group 2:2/1-006A	7684	6403	10,757	0	9221	5763	8964	0	11,141	8831
1-006B	12,532	15,534	15,289	251	11,279	11,279	19,550	0	11,964	10,725
1-006C	7189	4433	9825	0	2996	4673	5751	0	2397	3519
1-006D	6956	9097	9632	790	9282	7598	6421	0	8562	2881
1-006E	5392	7549	7789	120	6351	3475	5774	0	6351	3650
1-006F	7285	15,117	15,663	3643	16,938	8560	10,564	0	16,938	3465
Group 3:3/1-006A	0	0	0	0	0	0	0	0	0	0
1-006B	0	0	0	0	0	0	0	0	0	0
1-006C	0	240	0	0	0	240	0	0	0	0
1-006D	0	0	0	0	0	0	0	0	0	0
1-006E	0	0	0	0	0	0	0	0	0	0
1-006F	0	0	0	0	0	182	0	0	0	244
Group 4:4/1-006A	5122	0	2049	12,806	640	4226	1281	0	384	309
1-006B	12,532	1253	9524	24,813	2506	2506	1253	0	1640	3285
1-006C	4793	1438	2157	11,982	1198	1198	599	0	1198	544
1-006D	3746	1070	1070	9912	1420	2890	3746	0	963	6774
1-006E	6373	3976	3976	11,645	5174	8170	5632	0	5174	7085
1-006F	10,928	2732	2550	14,570	911	9107	7285	0	911	14,331
Group 5:5/1-006A	0	6403	0	0	2945	2817	2561	0	1281	3666
1-006B	0	8277	251	0	11,279	11,279	4261	0	11,460	11,054
1-006C	0	5871	0	0	7788	5871	5632	0	8387	7919
1-006D	0	535	0	0	0	214	535	0	1177	1047
1-006E	0	240	0	0	240	120	359	0	240	1030
1-006F	0	364	0	0	364	364	364	0	364	173
TOTAL:	90,532	90,532	90,532	90,532	90,532	90,532	90,532	90,532	90,532	90,532

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	40,664	41,440	39,669	0	41,852	47,133	39,851	0	54,461	29,307
Decade 5 *	90,532	69,461	90,532	0	75,770	85,567	90,532	0	72,645	66,579
Roadless:										
Decade 1	49,868	49,092	50,863	90,532	48,680	43,399	50,681	0	36,071	61,225
Decade 5 *	0	21,071	0	90,532	14,762	4965	0	0	17,887	23,953
Wilderness:	0	0	0	0	0	0	0	90,532	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The West Pioneer Roadless Area (1-006A through F) is designated to wilderness in Alternative I only.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads and motorized use of the area could be eliminated. Established trail systems could be used for foot travel to the places of interest in the area.

The 68,845 acres of land tentatively suitable for timber production would not be available under this prescription. Some of this acreage, such as the North Fork of Doolittle Creek in area 1-006B, is very productive and has some higher than average existing volumes when compared to the rest of the Big Hole area. Much of the tentatively suitable acreage in area 1-006C has low existing volumes due to low site productivity and standard stands; the species is prodominately lodgepole pine.

Current livestock grazing, 8638 AUM's, could continue on the portions of the 17 allotments involved but management practices may change somewhat. Presently, permittees use vehicles to some degree to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to increased use of horses and pack mules. This would require more time and require a great commitment from the permittee for livestock management.

Intensive grazing systems now in effect would continue. Wilderness designation may preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource. Range improvement maintenance activities would continue but be more difficult because of more difficult access.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes might occur to various wildlife species, depending on natural events within the roadless area, and affect population levels accordingly. Basic wildlife habitat management would be accomplished through natural fires and long-term effects would approximate a natural situation. Wildlife population levels would vary, sometimes greatly. These units also provide high quality elk spring, summer and fall range within security areas. Mountain goats exist in the area yearlong. Deer are also year-round residents but winter in other areas and in portions of 1-006C. Elk winter ranges would continue to provide necessary forage because these areas are permanent grasslands. Extensive elk winter ranges exist in the lower elevations of 1-006A and B and are crucial to the survival of elk within the West Pioneers. Winter range for mountain goat also exists here.

Other nonpriced resource values are affected as follows:

Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.

Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity in the System since this area is generally of lower elevations when compared to other wilderness areas.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgeople pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management. These streams are important contributors to the Big Hole River which possesses national fisheries significance, particularly for the Arctic grayling. This is the only river system in the lower forty-eight States having an Arctic grayling population.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The recreation service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Maverick Mountain, a local ski area, would not be able to expand its runs and facilities into area 1-006D. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access, resulting in a higher quality experience level. The heavy use of this area by motorcycles and snowmobiles would be curtailed.

Under wilderness designation, this area would eventually be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Approximately 80 percent of these areas have very high favorability for locatable minerals. A significant amount of mining activity, including drilling, has occurred in these areas.

Exercise of valid existing rights on 289 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December 1983, there were approximately 79,431 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

The West Pioneer Roadless Area (1-006A-F) has been assigned to these prescriptions in all Alternatives except I; from as little as 5 percent in Alternative D up to 76 percent in Alternative C.

Intensive timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal requires the construction of permanent roads and modifies the natural appearance of the area for approximately 25 to 40 years or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would also be long term onsite evidences of man's activities. The cutting units themselves would be impacts rarely visible from the Big Hole Valley due to topographic screening. Area 1-006D is also an area in which visual quality could be adversely affected by roading and timber harvest. The area can be seen from Highway 278 and the Wise River/Polaris road. Many recreationists travel both of these roads.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Some roads would be visible from the Big Hole Valley. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit somewhat by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. This would also affect permittees through additional range maintenance needs. Range activities would not significantly affect the wilderness potential.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas. Activities would also be visible from State highways in the Big Hole Valley.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities. However, associated roading would also be noticed from State highways to the Big Hole Valley.
>
> The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area. Elk security would be affected by timber roads, as these provide more access into presently secure areas, whether or not they are open to vehicle travel during hunting season.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated to the extent practical in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would most likely shift their activities to less developed parts of the Forest, thus concentrating and increasing use in those areas. Primitive recreation will be affected the most as these opportunities will become less available. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created and permittee management emphasis assured.

Assignment of prescriptions 10-15, 10-17. 10-18, 10-13, 9-12, 9-14, 14-14, 30-2-, 30-16, 30-29, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. Approximately 80% of these areas have very high favorability for locatable minerals. A significant amount of mining activity, including drilling, has occurred in these areas.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Less than 1 percent of the West Pioneer Roadless Area (1-006A-F) has been assigned these prescriptions in Alternatives B and G only.

Since so little of this roadless area is assigned these emphases, the impacts from manaement activities will be minimal. Therefore, the impacts information is combined with the impacts for other range activities in Part V. Designation: Nonwilderness, Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian, below.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

Portions of the West Pioneer Roadless Area (1-006A-F) are assigned these prescriptions in all Alternatives except I; from 11 % in Alternative W to 95 percent in Alternative D. The West Pioneer Recreation Area is included in this grouping in all of the alternatives with the exception of Alternative A, Current Direction, and Alternative I, Max Wilderness.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/ roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other recreation or service-oriented businesses. Maverick Mountain Ski Area would not be able to expand its runs and facilities into area 1-006D. Mineral exploration could occur; however, cost to operations would likely increase somewhat under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. Approximately 80 percent of these areas have very high favorability for locatable minerals. A significant amount of past mining activity, including drilling, has occurred in these areas.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Approximately 25 percent of the West Pioneer Roadless Area (1006A-F) has been assigned these prescriptions in Alternatives B, F, G, W and S; from less than one percent in Alternative C to 15 percent in Alternative S (the Proposed Action).

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural, and to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads and unimproved wheeltracks also could be expected to increase. Motorized use for range management would not appreciably increase in area 1-006D.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some localized short-term impacts on visual quality. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

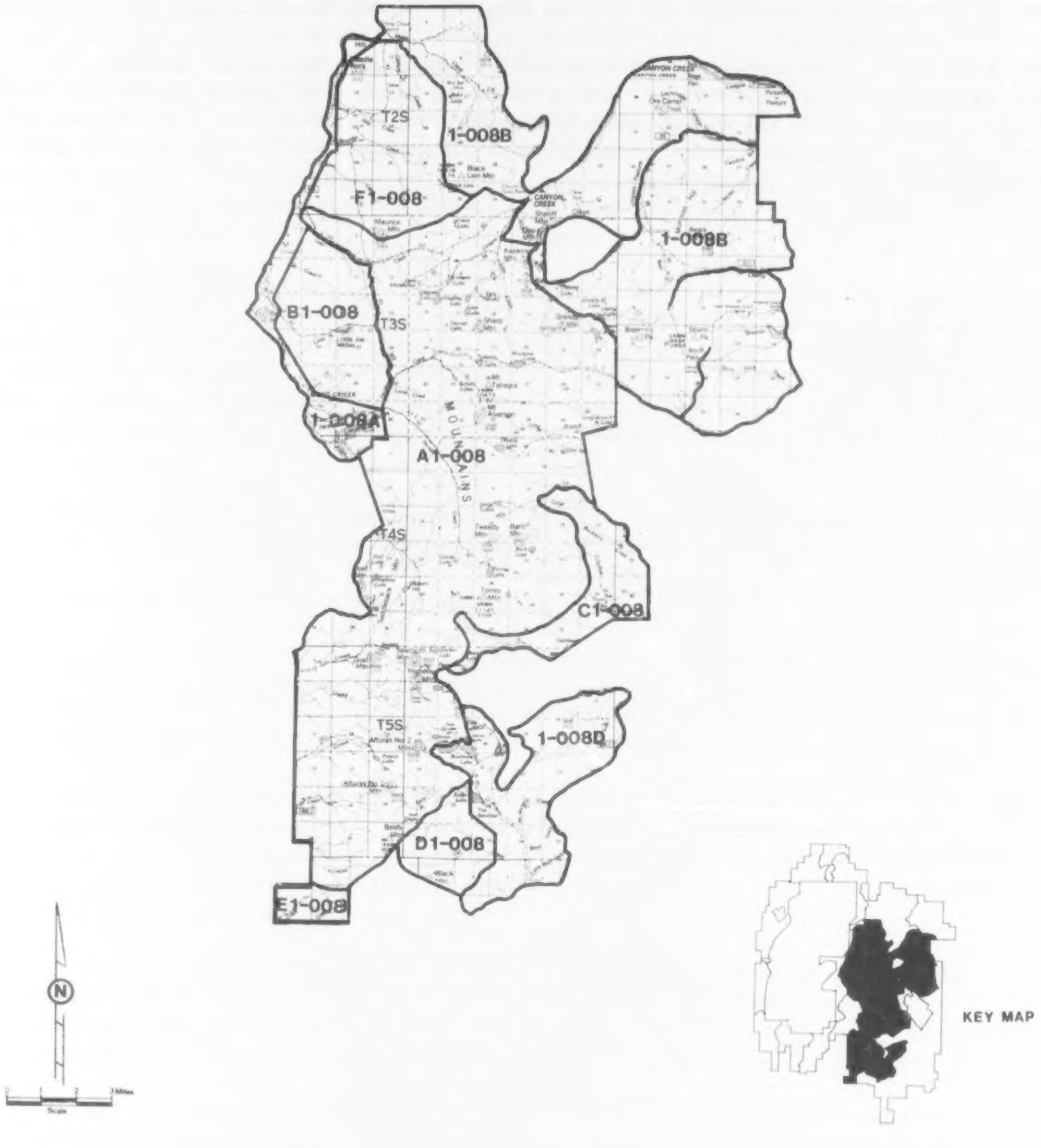
Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Special areas of concern in these units would be elk winter range and elk calving areas. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

ROADLESS AREA 1-008

EAST PIONEER


T2S
1-008B
F1-008
1-008B
B1-008
T3S
1-008A
A1-008
MOUNTAINS
T4S
C1-008
T5S
1-008D
D1-008
E1-008
N
Scale
3 Miles
KEY MAP

PIONEER PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-008 East Pioneer	Gross Acres	Net Acres
A1-008	61,295	61,295
B1-008	7,007	7,007
C1-008	6,130	6,130
D1-008	3,708	3,708
E1-008	1,415	1,415
F1-008	10,088	10,088
1-008A	3,818	3,649
1-008B	42,046	41,778
1-008D	9,601	9,473
Total	145,108	144,543

I. DESCRIPTION

The center of this roadless area contains the crest and adjacent slopes of the strongly glaciated East Pioneer Mountain Range which involves the Torrey Mountain Area (A-F1-008). This chain of mountains is comprised of steep cirque headwalls, rocky cirque basins with numerous scenic mountain lakes (over 30), high rugged peaks, and glacial trough valleys. The remainder of the area is characterized by steep footslopes, high hilly glacial moraine, and glacial valleys. The area slopes to moderately steep foothills along the Forest boundary in the east. Areas A1-008 through F1-008 (Torrey Mountain) extend from the southwest boundary of the Forest at Garrett Hill to the confluence of Sheep and Clifford Creeks on the north. Streams flow in the Pioneers easterly and westerly to the Big Hole River, Wise River, and Beaverhead Rivers and Grasshopper Creek. This area contains some of the Forest's highest mountains--Tweedy (11,154 ft.) and Torrey (11,147 ft.). Lowest elevations occur in the Rock Creek vicinity (6,000 ft.).

Areas 1-008A through 1-008D contain several separate units that completely surround the body of A1-008 through F1-008 and are bordered on the north and west by Canyon Creek, on the south by Rock Creek, and on the east by BLM and other National Forest lands. The south end of 1-008A is nearly level with gently undulating uplands of the Wise River/Grasshopper Divide. On the west side of Wise River, steep, dissected slopes break abruptly to the broad Wise River Valley, while the east side drops from long, moderately steep rolling foothills to the valley floor.

Area 1-008B occupies deep, U-shaped glacial trough valleys near Canyon Creek in the northeast. Deep canyons are carved in the south of this area and have long, steep, sideslopes. Many lakes lie along the western boundary of this area; all are located in the high country.

Much of Area 1-008D contains steep canyons and broad, rocky ridgetops which contain several mountain lakes. Estler Lake, the largest, has 37 surface acres.

Soils and geology are very complex, with moderately deep clay and loam along with rocky silt loams in the northern third of the area. Coarse, sandy loams derived from granitic rock dominate the center of the area. In the south there are high water tables in wet seeps and small parks. The dominant bedrock in the northern region of 1-008 is limestone, although many other soil types are included.

Vegetation on higher elevation slopes and ridges is predominantly whitebark pine. Alpine vegetation occurs above timberline at 9,000 feet. On the middle elevation slopes which make up most of the remainder of the area, vegetative cover is mostly forest with lodgepole pine, Douglas-fir, subalpine fir and Engelmann spruce. Rocky slopes and peaks, talus slopes and rock outcroppings occur, along with small alpine meadows and open stands of whitebark pine and subalpine fir. Many large meadow areas of grass and sage surround the core area of A-F1-008.

Most precipitation is snow which creates potential avalanche hazards. Snowfields last well into summer. During the winter snowcover facilitates snowmobile access to many of the higher lakes.

Areas 1-008A through 1-008D are accessed from Forest roads #187, #192, and #1011 from Interstate 15. Areas A1-008 through F1-008 can be reached by cross-country vehicles at lower elevations, from the Canyon Creek road (A1-008), the Rock Creek road (A1-008), the Willow Creek road (C1-008), and the Birch Creek and Kelly Reservoir roads. These roads generally require four-wheel-drive units and are not navigable in winter.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The natural integrity of A1-008 is particularly outstanding with alpine scenery, lakes and diversity of vegetation. High ridges and peaks offer exceptional views. Parts of the area are visible from Interstate 15. Patented claims exist in the head of Trapper Creek and in Jacobsen Meadows. The area has a strong tradition and history of mining and exploration activities. Area 1-008A-D has low to medium values as a wilderness due to many miles of low standard jeep trails, range developments and extensive mining activities.

Area B1-008 has low to moderate natural integrity and appearance because of the lack of diversity of its features and because of motorized access to it.

The mountain lake complex of F1-008 has a very high natural integrity and appearance. The balance of the area has low to moderate qualities because of the lack of diversity and the many mining roads in the Boulder Creek area.

Many logging and road developments on patented claims near this area detract from the appearance and natural integrity of 1-008A.

The natural integrity and appearance is low in 1-008B because of mining developments in Trapper Creek and the open range aspect of most of the unit.

B. OPPORTUNITIES FOR SOLITUDE

Area A1-008 provides the greatest opportunity for solitude because of its large size and location away from man's influence.

There are some opportunities for solitude in B1-008 but the area is relatively close to the Wise River-Polaris road and receives a considerable amount of motorbike, snowmobile, and 4x4 use, especially on the lower Little Joe Trail.

Area F1-008 provides a high degree of solitude. It is isolated and receives very little use with the exception of outfitter trips into the high lakes from Canyon Creek Guest Ranch.

There is only slight opportunity for solitude in area 1-008A due to close proximity of roads, the Mono Creek Campground and the relatively heavy use of the David Creek Trail by backpackers.

The western part of area 1-008B provides a good opportunity for solitude, but the remainder is close to mining developments, the Trapper Creek road, and fairly intensive cattle grazing.

C. PRIMITIVE RECREATION OPPORTUNITIES

Area A1-008 offers a very good opportunity for primitive recreation. Many of the high lakes are popular with backcountry hikers, horseback riders and campers. Some technical and challenging rock-climbing opportunities are available in the highly-fractured rock faces of David Creek.

Most of the use in area B1-008 is from hunters and bikers. The Little Joe Trail provides the opportunity for primitive hiking and camping but receives slight use.

There is a developed trail system into the lake complex of F1-008 that provides excellent primitive recreation opportunities. The balance of the area offers no notable experiences.

Area 1-008A has limited opportunities for the primitive recreationist. Use that does occur is from hikers traversing the area to access the high mountain lakes in A1-008.

D. OTHER FEATURES

The Charcoal Kilns in Canyon Creek, constructed in the late 1800's, are preserved and provide an interesting stop for visitors in 1-008B. The ghost town of Coolidge, Montana and the historic Elkhorn Mine are adjacent to A1-008 at Elkhorn Creek. Another ghost town is located at the Hecla Mine in Trapper Creek.

E. MANAGEABILITY AND BOUNDARIES

The large size of the core area (A-F1-008) and all adjoining portions (1-008A-D) provide a sufficient size for wilderness classification, especially if combined with a small portion of BLM land on the southeast. With all areas considered, the amount of diversity and opportunity for solitude increase wilderness values. Areas 1-008A through 1-008D, if studied singly, would be affected by their size. Area 1-008A is as narrow as one mile in width in places and is bordered by several miles of range fence.

Some opportunities exist to adjust the southern boundary of area A1-008 to provide a more manageable boundary. Other boundaries of 1-008 are sufficiently manageable as they now exist.

1977 Inventory Acres:	94,091 gross	93,859 net
1983 Inventory Acres:	145,108	144,543
Change	+ 51,017	+ 50,684
Reason for change in inventory acres:		
Addition of Unit Plan roadless	+ 59,804	+ 59,242
Boundary Adjustment to meet roadless Criteria	- 3342	- 3342
Acreage Recalculation	- 5445	- 5216

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-008A VALUE	1-008B VALUE	1-008D VALUE	A1-008 VALUE	B1-008 VALUE	C1-008 VALUE	D1-008 VALUE	E1-008 VALUE	F1-008 VALUE	COMBINED VALUE
Acres											
Gross	Acres	3818	42,046	9601	61,295	7007	6130	3708	1415	10,088	145,108
Net	Acres	3649	41,778	9473	61,295	7007	6130	3708	1415	10,088	144,543
Recreation											
Primitive	RVD's	46	528	121	641	89	77	47	18	261	1828
SPNM	RVD's	67	768	176	933	129	113	68	26	380	2660
SPM	RVD's	66	760	174	923	128	112	67	26	371	2627
Range											
Existing obligated suitable	Acres	1288	14,420	1093	795	1470	285	88	635	697	20,771
Allotments	# of	3	5	2	5	2	1	2	1	4	13*
AUM's	AUM's	432	2795	181	134	381	63	13	98	442	4539
Existing vacant suitable	Acres	0	0	0	0	0	0	0	0	0	0
Allotments	# of	0	0	0	0	0	0	0	0	0	0
Timber											
Tentative suitable	Acres	2821	21,185	5081	21,762	5834	4846	2362	1041	6966	71,898
Standing Volume	MBF	15,633	118,709	26,405	117,278	32,349	25,935	12,337	5924	36,892	391,462
Corridors											
Existing/Potential	# of	0	0	0	0	0	0	0	0	0	0
Wildlife T&E											
Bald Eagle	Acres	0	0	0	0	0	0	0	0	0	0
Big Game											
Winter Habitat	Acres	609	14,534	750	26,155	0	2923	2682	1415	2543	51,611
Elk											
Winter Habitat	Acres	0	1895	0	2414	0	0	0	1415	0	5724
Deer											
Winter Habitat	Acres	0	5257	0	866	0	0	0	1415	0	7538
Significant Fisheries											
Stream Miles	Miles	9.8	46.2	16.1	85.7	7.5	17.4	5.5	.5	14.0	202.7
Stream Habitat	Acres	19.2	28.2	5.6	30.6	2.7	5.6	.5	.2	.9	93.5
Lakes	# of	0	12	6	55	0	8	0	0	3	84
Lake Habitat	Acres	0	52	67	465	0	10	0	0	4	598
Water Developments											
Existing	# of	0	0	1	3	0	3	0	0	0	7
Minerals											
Very High	Acres	3649	41,778	9473	15,637	0	1226	2596	0	10,088	84,447
High	Acres	0	0	0	45,658	7007	4904	1112	1415	0	60,096
Moderate	Acres	0	0	0	0	0	0	0	0	0	0
Low	Acres	0	0	0	0	0	0	0	0	0	0
Claims	# of	82	531	85	253	12	19	49	23	190	1244
Oil and Gas Potential											
Very High	Acres	0	0	0	0	0	0	0	0	0	0
High	Acres	0	0	0	0	0	0	0	0	0	0
Moderate	Acres	3649	41,778	9473	61,295	7007	6130	3708	1415	10,088	144,543
Low	Acres	0	0	0	0	0	0	0	0	0	0
Oil and Gas Leases											
Leased area	Acres	2549	40,408	8760	185	300	0	0	0	1540	53,742

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* Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of areas.

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1. Recreation

All areas in the East Pioneers furnish diverse recreation activities from primitive to semi-primitive in nature. Mountain climbing, horseback riding, backpacking, and cross-country skiing are enjoyed here by many visitors. Scenic appreciation and cross-country travel is challenging due to steep rock slopes and lack of interconnecting trails.

Areas A1-008 through F1-008 have exceptional primitive and semi-primitive recreation opportunities. High, often snow-capped peaks with clear mountain lakes challenge the hiker and fisherman. Forest trails leading to these areas are abundant and many are closed seasonally. Winter users may encounter significant avalanche hazards in A1-008.

In all seasons, there is heavy dispersed recreation in 1-008A; motorized recreation with snowmobiles is a popular sport during the winter, and in warmer seasons, four campgrounds which are developed in and around the Wise River drainage area receive considerable use. Motorcycle riding into the high lakes is popular during the summer.

Developed recreation is also available in 1-008B. There is a small campground outlying the area at Canyon Creek as well as the privately owned Canyon Creek Guest Ranch which uses the area surrounding the ghost town at Hecla Mine for scenic tours and conducts guided hunts for elk and deer at the top of the ridge between Trapper and Canyon Creeks. Lakes in the head of Canyon Creek are a primary attraction. Most of the area is heavily used during big game season.

In 1-008D, higher elevations provide outstanding recreational settings among high rocky peaks, steep rocky ridges, open grassland parks and forested basins and lakes. No developed recreation sites are included.

2. Wildlife

Areas A through F1-008 have a significant variety and abundance of wildlife. Unique golden trout inhabit Sawtooth and Hidden Lakes. Mountain goat habitat is located in the high ridges of the Pioneer Mountains with elk winter range in the southwest portion. Deer, moose, bighorn sheep, black bear, and wolverine, plus various species of smaller nongame animals, also live in the areas. These areas contain over 25 lakes up to 35 acres in size, most with trout fisheries.

Area 1-008A contains some moose range and elk summer range. Most main streams are important spawning areas for fish from the Big Hole River.

Mule deer winter along the lower reaches of Canyon Creek and Trapper Creek in area 1-008B. Elk winter in the Devil's Hole vicinity in the north part of the unit, and some moose summer in upper Trapper Creek and winter in lower Trapper Creek. A few mountain sheep inhabit the rugged eastern portion, in Canyon Creek; mountain goats are found from the Canyon Creek Guard Station to Torrey Mountain. A few Merriam turkeys are still found in the eastern part of the area. All lakes support fish; Lion Lake sustains populations of rainbow trout.

Extensive areas of deer and elk winter range are located along the lower creek bottoms in 1-008D. Portions are important summer range for deer and antelope. Most of the lakes have trout fisheries.

3. Water

Water quality throughout area 1-008 is high, with an excellent capacity to receive, store and produce water. Fresh water lakes occur throughout the area, especially at higher elevations. Streams here provide consistent yearlong flows.

Major drainages from area A1-008 include Rock, Willow, Gorge, Birch, Rattlesnake, Lake, Clark, Elkhorn, and David Creeks. An irrigation dam is located on Waukena under Forest Service permit. Most of the precipitation in this area is received as snow. Little Joe Creek drains into Wise River from B1-008. Area C1-008 empties its major water source, Gorge Creek, into the Big Hole River.

The capacity of D1-008 to receive, produce and store water is fairly high. The southeast corner contains part of the Dillon Municipal Watershed. Area E1-008 is small, with no major drainages. Area F1-008 contains two major drainages into the Big Hole and Wise Rivers--Boulder Creek and Canyon Creek.

Water from the lower portions of Elkhorn Creek is contaminated by drainage from the Elkhorn Mine in area 1-008A. The main drainage here is Rattlesnake Creek.

There are numerous lakes in 1-008B and all drain into the Big Hole River from Sheep, Cherry, Trapper, Rock and Canyon Creeks.

The capacity of area 1-008D to receive, store and produce water is fairly high. Active irrigation dams include Estler Lake, under Forest Service permit; and Kelly Reservoir, under Deparment of Interior easement, which is located outside the 1-008D boundary within a half-mile. Boatman, Minneopa and Tent Lakes have breached dams. Part of the water for Dillon is taken from the Rattlesnake drainage approximately 5.5 miles below the Forest boundary. Natural turbidity is low.

4. Livestock Operations

Cattle use dates back to the early 1900's in areas A1-008 through F1-008. About one-half the area is within grazing allotments. The higher steeper areas are generally outside allotments. Cattle graze nearly all suitable range present within allotments from early June through September. The affected allotments are predominantly under grazing management systems and are intensively developed.

Five allotments cover the lower slopes surrounding A1-008; Willow Creek #261, Browns-Cherry #10, White Creek #33, Lake Creek, #22, and Farley-Dyer #20. East Wise River #36 is a closed allotment. Area B1-008 contains portions of two grazing allotments, Jerked Prairie #211 and Grasshopper #6. Only one-fourth of area C1-008 is grazed under the Willow Creek #261 allotment. Area D1-008 contains only a few acres of allotments #20 (Farley-Dyer) and #25 (Rattlesnake). The entire acreage of E1-008 is permitted to Farley-Dyer #20. F1-008 includes small portions of four grazing allotments; Sheep Mt. #51, Vipond Park #30, Canyon Creek #13 and Jerked Prairie #211.

Cattle graze over nearly all of 1-008A under portions of three allotments--Grasshopper #6, Jerked Prairie #211 and Sheep Mt. #51. Area 1-008B is intensively grazed by five allotments--Browns-Cherry #10, Trapper Creek #29, Canyon Creek #13, Vipond Park #30, and Sheep Mt. #51. In 1-008D, about one-half the surface is under permit, with two allotments present--Birch Creek #260 and Rattlesnake #25.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majcrity of these areas are currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber

In the northwestern segment of 1-008, vegetation consists of about one-third forest. At mid-elevations throughout, lodgepole pine is the major species. Centrally are found a mosaic of large bouldery parks, wet streamside meadows, and fairly open stands of lodgepole pine. Farther north, vegetative cover is mostly forest, but dotted by numerous small parks, meadows, and willow bottoms. Vegetation on higher elevation slopes and ridges is dominantly whitebark pine. Alpine vegetation occurs above timberline, about 9,000 feet. Timber resources in this region present access problems and haul roads are difficult and expensive to build. There are wide variations of site productivity from 20 to over 80 cuft/ac/yr.

7. Minerals/Oil and Gas

Much of A through F1-008 and 1-008A through D is highly mineralized. Exploration drilling is currently occurring in F1-008 in an attempt to further define a large molybdenum occurrence. Intensive exploration for molybdenum is also occurring in 1-008A. Several mines are in commercial production on a sporadic basis. Geologic favorability for locatable minerals is very high on 60 percent of the areas and high on 40 percent of the areas. Geologic favorability for oil and gas is moderate. Most acres outside the East Pioneer proposed wilderness have been leased for oil and gas. Geophysical exploration has occurred within some parts of the Pioneer Mountains.

8. Cultural Resources

Area 1-008 contains historical and scientific study areas and unique reservoirs of topography, culture and ecosystems.

9. Land Use Authorizations

A snow survey course authorized to the Soil Conservation Service at Lake Abundance is located in Area F1-008.

10. Non-Federal Lands

Areas A through F1-008 contain no private acreage, but 1-008A has 169 acre south of Jacobsen Meadows in Section 35, R12W, T3S. There are 268 acres of private land in 1-008B located in the vicinities of Lion Mt., Picketts Pasture and Brownes Creek. 1-008D contains 128 acres of private land.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
All areas have low fire occurrence but the potential for a major burn is present in many areas and will continue to increase over the years.

2. Insect and Disease
There is a heavy spruce budworm infestation at lower elevations.

V. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The nearest wilderness area is the Anaconda-Pintler which is not used extensively at the present time. The area is 50 miles from the closest population center of over 30,000 population.

2. Contribution to Wilderness Preservation System
The Torrey Mountain Area (A-F1-008) contains unique reservoirs of topography, culture and ecosystems. There are significant wildlife management considerations that would be foregone if the area is classified as nonwilderness. It has over 30 mountain lakes, some containing populations of uncommon fish--the Arctic grayling and the golden trout. It provides occupied habitat for wolverine, mountain goats, bighorn sheep, moose and other animals and birds common to southwest Montana.

Challenging rock-climbing opportunities are available along with other primitive forms of recreation. It contains areas of historical and scientific study.

3. Public Interest
Area 1-008 comprises two roadless areas (#40, Maurice Mountain and #31, Barb Mountain) and several essentially roadless areas identified in RARE I. In October 1973 the Chief of the Forest Service filed a Final EIS on RARE I in which he selected the 1-008 areas as a new wilderness study area.

The wilderness potential of the 1-008 areas was studied as a part of a Forest planning process on the Beaverhead. In 1977, the Forest filed a Draft EIS and Proposed Land Management Plan in which a large portion of the area was assigned to Wilderness Study Management. Public comment on the Draft EIS and Plan indicated strong support for wilderness designation. Opponents of wilderness designation also expressed concerns, particularly for the timber and minerals resources within the Wilderness Study Area.

In mid-1977 the East Pioneers area was identified as roadless in the RARE II planning process. The wilderness potential of the East Pioneers was evaluated in the Forest planning process being conducted concurrently with RARE II. Analysis resulted in nonwilderness designation of a portion of the roadless area which was then dropped from further evaluation in RARE II. The other, larger portions were assigned to Wilderness Study management in the 1978 Beaverhead Final EIS and Land Management Plan and went on to be further evaluated in the RARE II process. In 1979 the Administration asked the Forest Service to provide a manageable boundary for the East Pioneers (Torrey Mountain). The area was then recommended for wilderness classification.

In 1983 all of the 1-008 roadless areas were inventoried in the current planning process. Since the various publics had expressed concerns specific to certain portions of the whole, the area was "divided" for analysis purposes to explore the various concerns. The wilderness potential, however, was considered for the area as a whole.

Concern for the various potentials of the area has sparked controversy among publics. Wilderness proponents are especially concerned that as much of the area as possible should be designated wilderness to maintain the wide diversity of vegetation, wildlife and fish, and topography. These publics cite the "excellent wilderness qualities;" "high wildlife, alpine, and scenic values;" and "watershed for the Big Hole and Beaverhead Rivers" concerns as reasons for wilderness designation. Other express their interests in the lake and stream fisheries. Wilderness opponents, on the other hand, express concerns about the mineral values that will be foregone if the area is designated as wilderness. Some say that the area has too many existing roads to be classified even as roadless.

Comment on the 1985 Revised Draft EIS was less divided than it has been in previous involvement activities. The "Conservationist Alternative", which drew strong support, proposed a wilderness area which followed, for the most, the boundary recommended in the Proposed Plan. The only significant deviation was the addition of a "stringer" that includes much of the area lying between Canyon Creek and Trapper Creek to within two miles of the Forest boundary. This "stringer" was a part of the RARE II area until the Forest Service identified a "manageable boundary" in response to Congressional request.

There was little comment on the areas exterior to the wilderness proposal. Again, timber industry and energy and nonenergy minerals industries expressed interest in retaining as much of the area as possible in the suitable timber base and in nonwilderness management, respectively, to preserve future options for development. A few commentors identified minerals concerns in the East Pioneers wilderness proposal.

Several commentors expressed concern for elk security in the Vipond Park area, and requested removal of the "two small islands" of timber from the suitable timber base.

Alternative Assignment for the East Pioneer Roadless Area (1-008)

Management Emphases	Alternative (Net Acres)									
	A	B	C	D	F	G	H*	I	W	S**
Group 1:1/A1-008	61,295	0	61,295	61,295	61,295	0	61,295	61,295	61,295	61,295
B1-008	7007	0	7007	7007	0	0	7007	7007	7007	7007
C1-008	6130	0	6130	6130	0	0	6130	6130	6130	6130
D1-008	3708	0	3708	3708	0	0	3708	3708	3708	3708
E1-008	1415	0	1415	1415	0	0	1415	1415	1415	1415
F1-008	10,088	0	10,088	10,088	10,088	0	0	10,088	10,088	0
1-008A	0	0	0	0	0	0	0	3649	0	0
1-008B	0	0	41,778	0	0	0	0	41,778	0	0
1-008D	0	0	9473	9473	0	0	0	9473	0	0
Group 2:2/A1-008	0	9361	0	0	0	12,664	0	0	0	0
B1-008	0	4905	0	0	5255	6306	0	0	0	0
C1-008	0	3065	0	0	3371	3065	0	0	0	0
D1-008	0	2039	0	0	1854	1854	0	0	0	0
E1-008	0	1057	0	0	986	1057	0	0	0	0
F1-008	0	3026	0	0	0	3126	0	0	0	0
1-008A	1460	912	2737	73	1825	1642	730	0	3102	1229
1-008B	11,698	8356	0	418	12,231	4178	3342	0	4178	1655
1-008D	4736	4736	0	0	4642	1680	947	0	4642	646
Group 3:3/A1-008	0	0	0	0	0	0	0	0	0	0
B1-008	0	0	0	0	0	0	0	0	0	0
C1-008	0	0	0	0	0	0	0	0	0	0
D1-008	0	0	0	0	0	0	0	0	0	0
E1-008	0	0	0	0	0	0	0	0	0	0
F1-008	0	0	0	0	0	0	0	0	0	0
1-008A	0	0	0	0	0	0	0	0	0	0
1-008B	0	1690	0	0	0	4178	4080	0	0	3986
1-008D	0	0	0	0	0	120	189	0	0	250
Group 4:4/A1-008	0	51,814	0	0	0	48,631	0	0	0	0
B1-008	0	2102	0	0	1752	701	0	0	0	0
C1-008	0	3065	0	0	2759	3065	0	0	0	0
D1-008	0	1669	0	0	1854	1854	0	0	0	0
E1-008	0	358	0	0	429	358	0	0	0	0
F1-008	0	7062	0	0	0	6962	10,088	0	0	10,088
1-008A	2189	2372	730	3576	1642	1825	2189	0	365	1990
1-008B	30,080	27,554	0	41,360	25,067	31,333	30,178	0	33,422	24,865
1-008D	4737	4737	0	0	4642	7319	8337	0	4642	7925
Group 5:5/A1-008	0	120	0	0	0	0	0	0	0	0
B1-008	0	0	0	0	0	0	0	0	0	0
C1-008	0	0	0	0	0	0	0	0	0	0
D1-008	0	0	0	0	0	0	0	0	0	0
E1-008	0	0	0	0	0	0	0	0	0	0
F1-008	0	0	0	0	0	0	0	0	0	0
1-008A	0	365	182	0	182	182	730	0	182	430
1-008B	0	4178	0	0	4480	2089	4178	0	4178	11,272
1-008D	0	0	0	0	189	354	0	0	189	652
TOTAL:	144,543	144,543	144,543	144,543	144,543	144,543	144,543	144,543	144,543	144,543

---

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

1/ Group 1 is Wilderness emphasis.

2/ Group 2 is Timber emphasis.

3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.

4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.

5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	21,120	21,898	3649	0	21,949	22,106	18,690	0	22,087	16,729
Decade 5 *	21,898	60,162	3649	0	59,290	46,307	46,612	0	36,970	41,722
Roadless:										
Decade 1	33,780	122,645	0	45,427	51,211	122,437	46,298	0	32,813	48,259
Decade 5 *	33,002	84,381	0	45,427	13,870	98,236	18,376	0	17,930	23,266
Wilderness:	89,643	0	140,894	99,116	71,383	0	79,555	144,543	89,643	79,555

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The East Pioneer Roadless Area (A through F1-008 and 1-008A through D) is designated wilderness in Alternative I. Portions of the West Pioneer Roadless Area are designated to wilderness in all alternatives except B and G; from 49 percent in Alternative F to 97 percent Alternative C. Areas A1-008 through E1-008 are designated wilderness in Alternatives H and S (the Proposed Action). This constitutes 55 percent of the total Roadless Area.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The numerous existing primitive roads and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. For example, areas 1-008A-D and F-1008 have a lot of roads associated with mining developments that will, over time, become less obvious if the area is classified wilderness, such as the the Little Joe Meadows and Jacobsen Creek jeep trails. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. The trails, originally developed as roads for construction of dams on the lakes, are generally wide. Without snowmobile and trail cycle use, these trails would be naturally narrowed in time.

The 28,728 to 71,898 acres of land tentatively suitable for timber production would not be available under this prescription, depending upon the alternative chosen. This would remove about 154.2 to 391.5 MMBF in standing volume (depending on the alternative selected). Potentially suitable timber stands are located in all portions of this area with the exception of A1-008.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 4539 AUM's, could continue on the portions of the 13 allotments involved but management practices may change. Presently, permittees use vehicles and horses to access and manage livestock within affected allotments. If wilderness designation were to preclude motorized access, permittees would have to adjust to using only horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Big game habitat security would be better protected in that no motorized access would be allowed. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Security for the mountain goat population in the Black Lion-Canyon Creek area would be maintained. So would security for other wildlife. Elk winter ranges such as those in 1-008B, E1-008, and A-1008, would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> Visual quality of the area, viewed from Interstate Highway 15, and the Wise River-Polaris road #484, would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System. Designation of this area would help lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Motorized use of the area by snowmobilers would be stopped.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., in spawning streams that feed the Big Hole River will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Timber industry representatives have expressed particular concerns about wilderness classification for areas around the fringes of 1-008, where the higher timber values are. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply, Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. The publics valuing wilderness would be supportive because wilderness advocates have placed a high value on this area. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Approximately 60% of these areas have very high favorability for locatable minerals.

Exercise of valid existing rights on 1244 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 53,742 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the acres encompassed by the East Pioneers Roadless Area (A through F1-008 and 1-008A, B and D) are assigned to these prescriptions in the alternatives, with the exception of Alternative I; from less than one percent in Alternative D to 26 percent in Alternative B.

Timber management (visual quality objectives modification/maximum modification) would occur on the lower elevations of these areas and will severely impact the wilderness and roadless resources. Timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

In those portions of this roadless area where timber prescriptions would have visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities. This would occur primarily in the areas visible from Interstate 15 and the Wise River road.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions. Outfitter and guide activities in the area and the recreational activities associated with the Canyon Creek Guest Ranch could be adversely affected.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation

setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; such as hunters, fishermen, backpackers, and so on. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supportive of this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. Approximately 60% of these areas have very high favorability for locatable minerals.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

Only a small portion of the East Pioneer Roadless Area (A through F1-008 and 1-008A, B & D) is assigned these prescriptions in Alternatives B, G, H and S.

Under these prescriptions, motorized use will likely continue for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase as a result of the intensive range management program.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife will tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because of the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive
Recreation/Custodial

Large portions of the East Pioneer Roadless Area (A through F1-008 & 1-008A, B & D) are assigned to the primitive and semi-primitive recreation and custodial prescriptions in all Alternatives except I, which assigns no acres to these prescriptions and Alternative D, which assigns less than 1 percent to these prescriptions. (see Table V.A.). The West Pioneer Recreation Area is included in this grouping in all of the alternatives with the exception of Alternative A, Current Direction and Alternative I, Max Wilderness. The Minneopa Recreation Area is also included in this grouping in Alternative S, the Proposed Action.

As long as areas managed under the primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/ roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. Motorized access to many areas would be allowed. However, restrictions on motorized use around alpine lakes would remain. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under the custodial emphasis would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Approximately 60% of these areas have very high favorability for locatable minerals.

5. Designation: Nonwilderness
Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

Relatively small portions of the East Pioneer Roadless Area (A through F1-008 and 1-008A, B and D) are assigned these prescriptions in all Alternatives except A, D and I; from less than one percent in Alternative C to nine percent in Alternative S (the Proposed Action).

The effects of implementing these prescriptions could be expected to be similar to, but slightly more severe than, those described under "Management Prescription: Primitive and semiprimitive recreation/custodial," above. Some vegetative manipulation such as sagebrush burning could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semiprimitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semiprimitive recreation activities will be adversely affected.

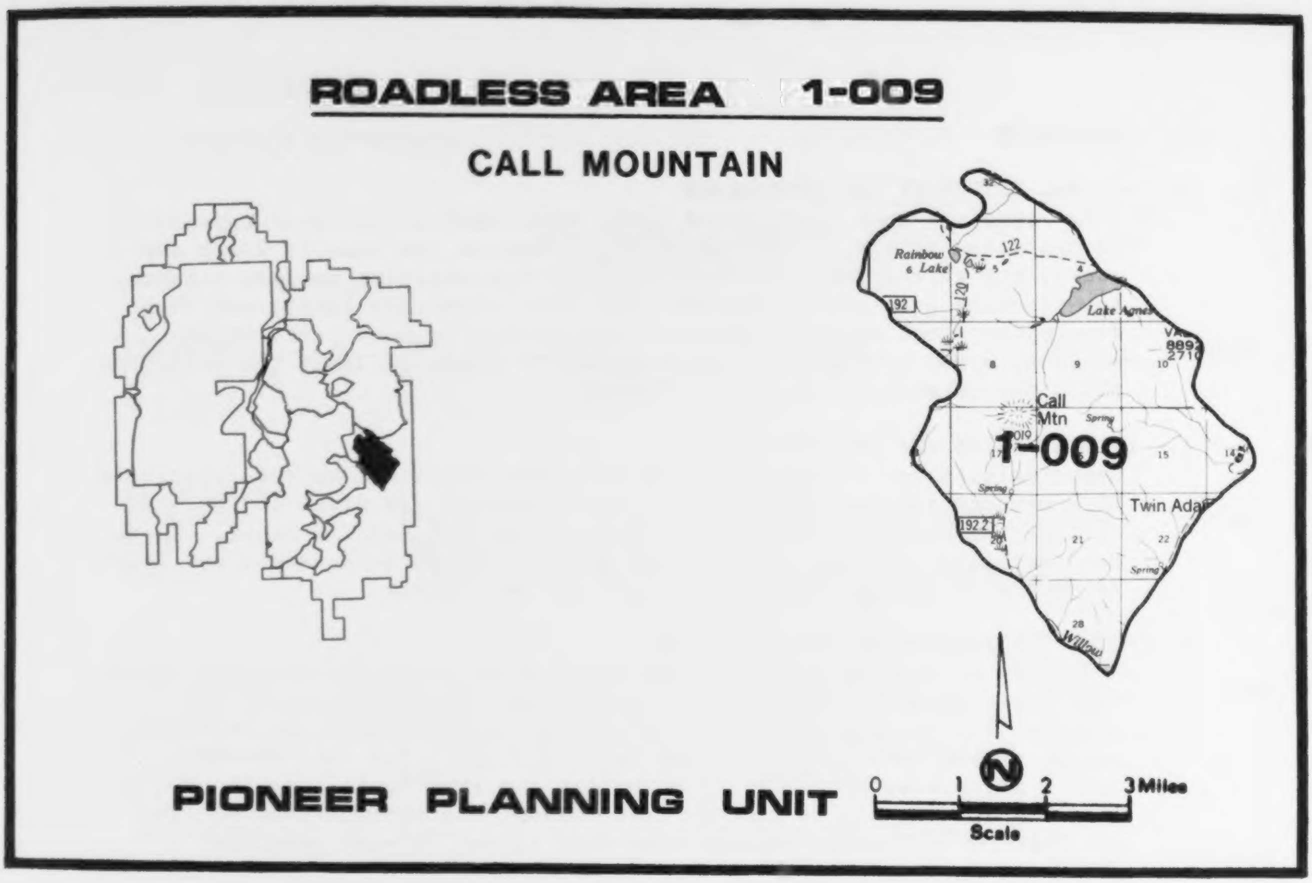
Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Existing motorized access restrictions would be maintained, prohibiting motorized vehicles in high alpine lake areas, for example. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Approximately 60% of these areas have very high favorability for locatable minerals.


ROADLESS AREA 1-009
CALL MOUNTAIN
Rainbow Lake
122
120
192
Lake Agnes
Call Mtn
1-009
Spring
Twin Adams
192.2
Willow
N
PIONEER PLANNING UNIT
0
1
2
3 Miles
Scale

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-009 Call Mountain	Gross Acres	Net Acres
	10,184	10,179

I. DESCRIPTION

The Call Mountain Roadless Area is located directly east of the central Torrey Mountain region in the Pioneer Planning Unit on the east slopes of the Pioneer Mountains. Rainbow and Agnes Lakes are within this unit.

The Roadless Area is generally mountainous country, dominated by Call Mountain which rises to 9,010 feet at the summit. Most terrain is steep and rocky and composed of steep, timbered slopes and rocky uplands covered with lodgepole pine. Douglas-fir with small amounts of spruce and alpine fir are common; the forested sites are usually in the low-to-moderately productive classes on steep to rocky terrain. Soils are deep and loamy in the grassland valleys.

Access is provided along the western edge by the Willow Creek Road. Uphill Creek Trail #120 starts at the junction of the Willow Creek Road and ends approximately two miles away at its junction with the Lake Agnes Trail. The Lake Agnes Trail runs from Brownes Lake to Agnes Lake to Rainbow Lake and ends on the Willow Creek Road. Approximately three miles of this trail are in area 1-009.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Other than the Rock Creek Guard Cabin site, most of the area appears to be unaltered by the activities of man. Much of the area is steep and rocky, and vegetation provides screening from existing manmade impacts. Low-standard jeep trails traverse the lower elevation lands, and range developments and mining activities are evident in many parts of the roadless area. Topographic and vegetative screening limit the area from which the impacts can be easily viewed.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude in this area are restricted by the relatively high use and limited attractions. Most visitors are drawn to the area by the fishing opportunities offered by Agnes and Rainbow Lakes. There are some opportunities for solitude outside of the lake sites, but there is little to attract visitors to most of these areas.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities are limited primarily by those things that limit opportunities for solitude. High recreation use in and adjacent to the area and intensive grazing systems limit the primitive nature of the recreation experiences. Lake Agnes and Call Mountain Trails are presently closed to motorized use from April 1 to December 1, limiting the impacts to hiking, backpacking, and nonmotorized hunting and fishing during the seasons when foot travel is most popular.

D. OTHER FEATURES

Cutthroat trout thrive in Rainbow Lake, and Agnes Lake contains the Arctic grayling, a species of special concern.

E. MANAGEABILITY AND BOUNDARIES

It would be difficult to combine this roadless area with other adjoining roadless areas. The Willow Creek road on the west and developed Forest lands along the perimeter define the boundaries of the unit.

1977 Inventory Acres:	9200 gross	9200 net
1983 Inventory Acres	10,184	10,179
Change	+ 984	+ 979

Reasons for change in inventory acres:

Existing Timber Sale and roads	- 371	- 371
Acreage Recalculation	+1355	+1350

III. AVAILABILITY

A. RESOURCE POTENTIALS

CALL MOUNTAIN ROADLESS AREA

Area Descriptor: 1-009

CATEGORY	UNIT	VALUE
Gross Acres	acres	10,184
Net Acres	acres	10,179
Recreation		
Primitive	RVD'S	129
SPNM	RVD'S	189
SPM	RVD'S	185
Range		
Existing obligated suitable	Acres	1518
Allotments	# of	2
AUM'S	AUM'S	310
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	6204
Standing Volume	MBF	34,375
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	4620
Elk		
Winter Habitat	Acres	0

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	4620
Significant Fisheries		
Stream miles	Miles	12.2
Stream Habitat	Acres	6.3
Lakes	# of	8
Lakes-Habitat	Acres	134
Water Developments		
Existing	# of	1
Minerals Favorability		
Very High	Acres	10,179
High	Acres	0
Moderate	Acres	0
Low	Acres	0
Claims	# of	151
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	10,179
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	10,109

1. Recreation
   Recreation use is primarily hiking and nonmotorized hunting and fishing. Snowmobiling is a popular winter sport in the area.

2. Wildlife
   The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, mountain goat and black bear. Furbearers and spruce and blue grouse are also found in this roadless area. No threatened plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk. Cutthroat trout thrive in Rainbow Lake and Agnes Lake contains the Arctic grayling, a species of special concern.

3. Water
   Rainbow and Agnes Lakes are the primary bodies of water in the unit. Water from the area flows, by way of Willow, Rock, and Lost Creeks, to the Big Hole River.

4. Livestock Operations
   Area 1-009 is within the Lost Willow Allotment and the East Pioneer Experimental Stewardship Area. Cattle graze the area from mid-June through September each year. Cattle use nearly all of the suitable range. The allotment is under an intensive grazing system, and there are a considerable number of range improvements in the area.

5. Ecology
   Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber
   Some highly productive timber sites occur in the wet draws; however, rocky, steep slopes make it difficult to access these areas for timber harvest.

7. Minerals/Oil and Gas
   Geologic favorability for locatable minerals is very high. Detailed exploratory drilling has identified a tungsten deposit that can be considered within the reserve base of the Forest. This deposit is located along the eastern border of the area. A significant amount of activity and claims extend into 1-009.

   Geologic favorability for oil and gas is moderate. Almost the entire area is leased for oil and gas. Limited seismic exploration has occurred near the eastern border of the area.

8. Cultural Resources
   The potential for prehistoric and historic cultural sites in this roadless area is presently unknown.

9. Land Use Authorizations
There are no land use authorizations in this area.

10. Non-Federal Lands
There are five acres of private land in the Call Mountain Roadless Area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire, insects and disease present no major problems in the Call Mountain area at this time.

2. Insect and Disease
See above.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The closest wilderness is the moderately-used Anaconda-Pintler area. The area is a long distance from major population centers with the closest centers over 30,000 being Butte, Bozeman, and Idaho Falls.

2. Contribution to the Wilderness Preservation System
This area would add to the land in the Wilderness Preservation System, thereby reducing the demand on lands already in the system.

3. Public Interest
The Call Mountain area was inventoried as essentially roadless in the 1972 roadless and Essentially roadless Evaluation (RARE I) and designated for nonwilderness uses through that process. In 1977 the area was again inventoried as roadless in the RARE II process. Its wilderness potential was evaluated in the land management planning process that was then occurring on the Forest. Public comment on the 1977 Forest DEIS and Proposed Forest Plan indicated only minor interest in wilderness designation for the roadless area. Through the planning process the area was removed from further study in the RARE II process and designated under nonwilderness management.

In 1983 the Call Mountain Area was again inventoried as roadless in the Forest planning process. The Forest sought comments on and interest in the inventoried areas through the "1983 Roadless Area Evaluation" brochure. A few respondents indicated an interest in wilderness classification for the area, primarily based on concern for the arctic grayling, a species of special concern. One respondent commented that the area should be retained as roadless and another opposed wilderness classification.

There was very limited support for wilderness designation of this area expressed in comments on the 1985 Revised Draft. Commentors did support retaining scenic values and relatively primitive nature near the lakes.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Call Mountain Roadless Area (1-009)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	0	0	0	0	0	10,179	0	0
Group 2: (Timber)	2545	4886	4770	204	5089	1730	1018	0	5089	956
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	305	0	0	0	305	509	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	7634	4784	5409	9975	5090	8044	8143	0	5090	8678
Group 5: (High Range/High Wildlife, Mod/Low Range Wildlife, No Timber)	0	204	0	0	0	100	509	0	0	545
TOTAL:	10,179	10,179	10,179	10,179	10,179	10,179	10,179	10,179	10,179	10,179

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	2545	5046	10,179	0	10,179	1790	1018	0	10,179	1018
Roadless:										
Decade 1	10,179	10,179	10,179	10,179	10,179	10,179	10,179	0	10,179	10,179
Decade 5 *	7634	5133	0	10,179	0	8389	9161	0	0	9161
Wilderness:	0	0	0	0	0	0	0	10,179	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Call Mountain Roadless Area 1-009 is designated wilderness in Alternative I only.

Wilderness can enhance the area's wilderness attributes since these are a few existing uses not usually associated with wilderness designation. The existing jeep trails in the lower elevation lands could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Two of the major trails in the area are currently closed to motorized use April 1 to December 1. This wilderness designation would not be a major impact on existing recreation use with the exception of snowmobile use.

Under wilderness designation recreation use would consist mostly of hunting and fishing and some hiking and cross-country skiing. The present recreational snowmobile activity, a popular use of the area, would be curtailed.

The 6204 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 34.4 MMBF in standing volume. Portions of the area are highly productive timber sites but steep terrain and rocky slopes would make access difficult.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Currently livestock grazing, 310 AUM's, is not a major use of the area, but the grazing that does occur is intensive and all suitable rangeland is being utilized. Grazing could continue on the portions of the two allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing would continue, but wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved; an important resource in that this area is visible from Interstate 15. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgeople pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of timber, range, wildlife, and recreation. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. Development of the tungsten deposit would be limited. The local recreation and tourism industries could benefit from the attraction of wilderness; however, this area would probably not attract a lot of nonlocal people to the area. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 151 mining claims will be severely restricted, but still may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 10,109 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Call Mountain Roadless Area (1-009) are assigned to these prescriptions in all the alternatives except I; from as little as 2 percent in Alternative D to 50 percent in Alternatives F and W.

Intensive timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, applied to the portion of the area visible from Rock Creek road and Interstate 15, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land". This is done to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, the steepness of the area limits the amount of additional range that could be available. Timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In most of the area where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident, not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> On the eastern and northern portions of the area, where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions. Hiking, hunting and snowmobiling activities will be most affected.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

Currently, social and economic effects center around the resource values of timber, recreation, and grazing. Under these prescriptions, timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not support this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. The entire area has very high favorability for locatable minerals. A tungsten deposit occurs near the eastern boundary of the roadless area.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

Less than 5 percent of the Call Mountain roadless area is assigned to these prescriptions in Alternatives B, G and H only. Therefore, the discussion of impacts is grouped into Category 4.

4. Designation: Nonwilderness
Management Emphases: Primitive and semi-primitive Recreation/Custodial

Portions of the Call Mountain Roadless Area (1-009) are assigned to these prescriptions in all Alternatives but I; from 47 percent in Alternative B to 98 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/ roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present relatively low levels and would not significantly affect wilderness potential. Range use is intensive, not extensive, in this area.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands located in the lower elevations to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. Trailbike access to Agnes and Rainbow Lakes would continue to be restricted. The amenities of the area would continue to support outfitter and guide operations. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. The entire area has very high favorability for locatable minerals. A tungsten deposit occurs near the eastern boundary of the roadless area.

5. Designation: Nonwilderness
Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

Less than 6 percent of the Call Mountain Roadless Area (1-009) is assigned to these prescriptions in Alternatives B, G, H and S only. Thus, impacts associated with these prescriptions will be slight and are encompassed by the discussion present for Category 4.

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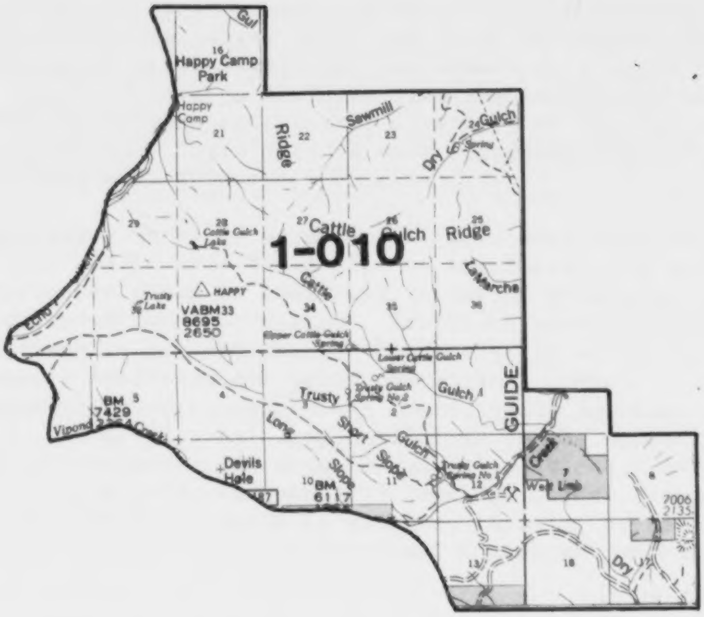
ROADLESS AREA 1-010

CATTLE GULCH RIDGE


Gul
16
Happy Camp Park
Happy Camp
21
Ridge
22
Sawmill
23
24 Gulch
Dry
Spring
29
28
Cattle Gulch Lake
27 Cattle
26 Gulch
25 Ridge
1-010
LaMarche
Trusty Lake
HAPPY
VABM33
8695
2650
Cattle
34
35
36
Upper Cattle Gulch Spring
Lower Cattle Gulch Spring
Trusty Gulch Spring No 2
Trusty
Gulch
GUIDE
BM
7429
5
4
Vipond
Creek
Long
Short
Slope
Slope
Gulch
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Creek
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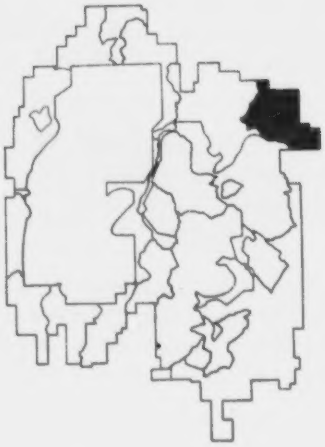
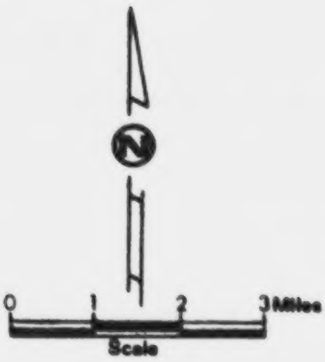
8
7006
2135
13
18
Dry



KEY MAP


N
0
1
2
3 Miles
Scale

PIONEER PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-010 Cattle Gulch	Gross Acres	Net Acres
	19,776	18,891

I. DESCRIPTION

The Cattle Gulch Roadless Area is situated in the northeastern corner of the Pioneer Planning Unit on the eastern slopes of the Pioneer Mountains. It is bordered on the north and east by the Forest boundary; on the north and west by the Quartz Hill and Echo Gulch roads and a maintained Forest Service road on the south. Access is via Forest system road #187 and jeep trails off Highways #43 and #91.

The topography of this area is very diverse. A series of gently sloping valleys are separated by narrow, rocky ridges. Long, steep slopes with numerous short, steep canyons drop abruptly to the Big Hole River at the north end. The average annual precipitation of rain and snow is low which produces limited amounts of water in the region.

The dominant bedrock in this area is limestone, although the geology is complex and many other rock types are included. Soils are generally shallow, rocky, silt loams. Limestone spires are scenic landmarks, and small cliffs with caves are numerous.

Vegetative cover, especially in the eastern portion is about half sagebrush/grassland. Seventy percent of the roadless area is winter range. Some land is forested and the remainder is rocky upland, noncommercial forest and willow bottoms. Lodgepole pine is the dominant species, but small scattered stands of Engelmann spruce grow along creek bottoms. Douglas-fir is common at lower elevations. Limber pine is found on mid-elevation limestone ridges in the northeast part of the area. Large, wolfy trees grow on south-facing slopes with extensive stands of mountain mahogany on lower slopes at Canyon Creek and Cattle Gulch.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Man's influence on the natural integrity is apparent with jeep roads, fences and water troughs. Manmade structures appear throughout and the impacts that exist are long-term in nature. The open nature of this country allows viewing of distant developments, especially lights at night. Mining and roading impacts are readily observable in the southeast quarter of the unit along creeks or benches to the south. There is an area once traversed by a power line from the Big Hole River at Divide to the Quartz Hill Mine. The only evidence of this line remaining is the cleared right-of-way (reforested in many areas) and old poles on the ground.

B. OPPORTUNITIES FOR SOLITUDE

Diverse topography and vegetative screening contribute to opportunities for solitude in this roadless area. However, these opportunities are somewhat intruded upon in some portions of the area by unmaintained roads and jeep trails. About five miles of unmaintained roads leave the Canyon Creek road and travel north along Canyon Creek and southeast into Dry Hollow Gulch. Trusty Gulch Jeep road runs northwest from Trusty Gulch Spring (#1) approximately 4.5 miles. This trail is presently closed to motorized vehicles from December 1 to May 1. The lower portion of the Lower Cattle Gulch Ridge jeep trail (approximately 1.5 miles) is open for jeep travel; however, the upper two miles is closed yearlong to motorized travel. A trail runs from Trusty Gulch Spring (#2) approximately three miles to Cattle Gulch Lake. Additionally, approximately two miles of trail lies in Dry Gulch on the northeastern corner of the roadless area.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities are those primarily associated with backpacking, hiking, nonmotorized fishing and hunting, and ski-touring. Relatively heavy use of the area by summer trailbikers and winter snowmobilers may result in some intrusions to those seeking primitive recreation experiences and solitude.

D. OTHER FEATURES

A traditional Nez Perce trail, pictographs, and old mining remnants provide interest for area visitors. Limestone spires contribute to scenic relief.

E. MANAGEABILITY AND BOUNDARIES

The Cattle Gulch Roadless Area is isolated from other Forest roadless areas by developed lands on the west and by a Forest road on the south. Boundary adjustments to exclude nonconforming uses would be very difficult, given the diversity and widespread nature of these uses. Jeep trails could be restricted to use only by motorized equipment needed to maintain range improvements and would naturally narrow somewhat with reduced use.

Two parcels of private land are completely surrounded by National Forest land. Presently, landowners access these lands via Forest roads.

1977 Inventory Acres:	19,700 gross	18,744 net
1983 Inventory Acres:	19,776 gross	18,891 net
Change	+ 76	+ 147

Change in inventoried acres is due to acre recalculation done in the Forest Planning Process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATTLE GULCH ROADLESS AREA
Area Descriptor: 1-010

CATEGORY	UNIT	VALUE
Gross Acres	acres	19,776
Net Acres	acres	18,891
Recreation		
Primitive	RVD'S	239
SPNM	RVD'S	347
SPM	RVD'S	344
Range		
Existing obligated suitable	Acres	9265
Allotments	# of	2
AUM'S	AUM'S	3752
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	5593
Standing Volume	MBF	32,813
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	13,224
Elk		
Winter Habitat	Acres	10,809

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	10,463
Significant Fisheries		
Stream miles	Miles	3.2
Stream Habitat	Acres	3.9
Lakes	# of	1
Lakes-Habitat	Acres	1
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	7556
High	Acres	11,335
Moderate	Acres	0
Low	Acres	0
Claims	# of	63
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	18,891
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	18,371

1. Recreation

Recreation use in the area is moderate and limited primarily to hunting, fishing and motorized travel. The area is used extensively by snowmobiles in the winter and trailbikes in the summer.

2. Wildlife

Mule deer winter along the lower reaches of Cattle Gulch and elk winter in the Devil's Hole area as well as in the upper reaches of Cattle Gulch. Bighorn sheep have been observed in the rugged eastern portion and inhabit the lower reaches of Cattle Gulch and Canyon Creek yearlong.

Upland game birds, such as spruce and blue grouse are also found in the roadless area. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk.

3. Water

Streams in the area serve as tributaries to the Big Hole River.

4. Livestock Operations

This area is under rest/rotation, and included in the Range Stewardship Program; also intensively managed for livestock grazing. Cattle graze lower areas from June 1 to the end of September in the Copp-Jackson and Vipond Park grazing allotments.

5. Ecology

This roadless area has a highly diverse ecology. Much of the area is representative of grassland/sagebrush steppes. In forested zones Douglas-fir and alpine fir climax series are being maintained in seral lodgepole composition by naturally occurring fire.

6. Timber

Timber harvest, beginning in the late 1800's, has taken place on much of the area. Recent timber cutting has been limited to removal of small quantities of firewood, posts, poles and Christmas trees. There is approximately 32.8 MMBF of standing volume in the unit, much of which is sawtimber.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is high (60%) to very high (40%).

Almost the entire area has been leased for oil and gas. Geologic favorability for oil and gas is moderate. There is a phosphate lease located in T1S, R10W; Section 35, SE 1/4, NE 1/4, E 1/2 and SE 1/4.

8. Cultural Resources

A traditional Nez Perce trail, pictographs, and old mining remnants are present in the roadless area.

9. Land Use Authorizations

There are no land use authorizations.

10. Non-Federal Lands

Two homesteads, totaling 885 acres, are located in the unit.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Natural fire occurrence has been minimal in this area. Use of prescribed fire could improve range and wildlife values in the roadless area.

2. Insect and Disease

There is a heavy infestation of spruce budworm that is killing the Douglas-fir, especially on drier sites.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The moderately used Anaconda-Pintler Wilderness is located 25 miles to the west, and Butte, Montana is within 25 miles. Dillon, Montana is approximately 40 miles south.

2. Contribution to Wilderness Preservation System

This area would contribute to the National Wilderness Preservation System by providing examples of low and mid-elevation grass and grass-sagebrush steppes, complex vegetative diversity, interesting geological features, and diverse topographic relief.

3. Public Interest

During RARE I this area was inventoried as a portion of the Quartz Hill Area, and through that process was designated for nonwilderness management. This area was again identified for wilderness consideration in the RARE II process. Through the Forest Land Management Planning process that was occurring concurrently with RARE II, the wilderness potential of the area was evaluated. Based on recommendations made in the 1978 Forest FEIS, the Cattle Gulch area was dropped from further consideration in the RARE II process. The area was then designated for nonwilderness uses specified in the 1978 Land Management Plan. The area was identified as roadless in the 1983 "Roadless Area Evaluation" brochure.

Historically this area has received little support for designation as wilderness. Respondents to that brochure did not indicate that this area had a high priority for wilderness designation.

Other than those who requested wilderness designation for all roadless areas, this area received no support for wilderness designation in public comments on the 1985 Revised Draft EIS and Plan Supplement.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Cattle Gulch Roadless Area (1-010)

Management Emphasis	Alternative (Net Acres)									
	A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	0	0	0	0	0	18,891	0	0
Group 2: (Timber)	1889	2020	3080	378	756	945	1430	0	1620	403
Group 3: High Range, High Range with Low Intensity Wildlife, No Timber)	0	1889	0	0	0	2263	1889	0	0	2836
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	17,002	2456	15,811	18,513	4723	3211	2834	0	4500	3995
Group 5: (High Range/High Wildlife, Mod/Low Range Wildlife No Timber)	0	12,526	0	0	13,412	12,472	12,738	0	12,771	11,657
TOTAL: 1-010	18,891	18,891	18,891	18,891	18,891	18,891	18,891	18,891	18,891	18,891

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres)									
	A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	1889	2020	3080	0	816	945	1430	0	1620	403
Roadless:										
Decade 1	18,891	18,891	18,891	18,891	18,891	18,891	18,891	0	18,891	18,891
Decade 5 *	17,002	16,871	15,811	18,891	18,075	17,946	17,461	0	17,271	18,488
Wilderness:	0	0	0	0	0	0	0	18,891	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

One hundred percent of the Cattle Gulch Roadless Area (1-010) is designated as wilderness in Alternative I. This is the only alternative that recommends any portion of the Cattle Gulch Roadless Area to wilderness.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. This area is heavily driven during hunting season. Wilderness designation will eliminate this popular motorized use. Recreation use would remain moderate and be limited almost exclusively to nonmotorized hunting, with some fishing, hiking and ski-touring. The fairly heavy existing trailbike and snowmobile use would be curtailed. Jeep trails, other than those used primarily for range management, could be used for foot travel to the places of interest in the area.

The 5593 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 32.8 MMBF in standing volume. Most timber harvest would occur along the western boundary of the roadless area, leaving a significant portion of the area in its present condition. Although some timber occurs along the eastern edge of the area, it would be very costly to harvest due to the high roading costs to access the area.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 3752 AUM's, could continue on the portions of the two allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly, because permittees currently use vehicles in maintaining spring developments and in salting activities.

The allotments in this roadless area are part of the Experimental Range Stewardship Program. Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas along the southern and eastern boundaries of the roadless area, would be maintained. The Devil's Hole area on the southern boundary of the area has been identified as a critical elk winter range. This area would be maintained by wilderness classification of the area. Bighorn sheep habitat in lower Canyon Creek and on Cattle Gulch Ridge is steep and rocky and would be unaffected by this designation.

Other nonpriced resource values are affected as follows:

> The northern, eastern and much of the sourthern boundaries of this roadless area can be seen by people traveling on the interstate (I-15) or on the highway (#43) to Wise River. Visual quality would be retained. The assigned "preservation" VQO would allow ecological changes only, except in small, site-specific instances where range developments are located and where historic range management activities will continue to take place.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity in the System.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, however, economic conditions and timber demand would have to increase dramatically for much of this area to be extensively harvested. Accessing timber stands, particularly on the eastern boundary, would be extremely costly. The service sector, primarily outfitter and guide operations, could benefit from the attraction of wilderness; however this area is small enough that users may not require the services of outfitters or guides for hunting activities. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Approximately 40 percent of the area has very high favorability for locatable minerals.

Exercise of valid existing rights on 63 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 18,371 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

Oil and gas development could preclude the retention of wilderness characteristics in some or all of the area. Surface occupancy leases cannot be canceled administratively, but lessee's rights can be purchased back by the U.S. Government, if feasible, in order to protect wilderness characteristics. Negotiations with lessees could result in the relinquishment of some leases or in the addition of some special stipulations to protect the wilderness resources (at the lessee's option).

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Cattle Gulch Roadless Area (1-010) are assigned these emphases in all Alternatives except I; from as little as 2 percent (in Alternative D) to 16 percent (in Alternative C).

Timber management will impact the wilderness potential only along the western fringe of the area, leaving a significant portion of the area as it is now. Timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from Quartz Hill road. The stumps and burned slash piles would be short-term intrusions until regenerated stands have grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater.

Vipond Park Allotment could benefit by the creation of transitory range which may become available for grazing. Range activities would not significantly affect the wilderness potential.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The impacts on opportunities for primitive and semi-primitive recreation in the roadless area as a whole will be minor.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment to prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife.)

Portions of the Cattle Gulch Roadless Area (1-010) are assigned these emphases in Alternatives B, G, H and S; from 10 percent in Alternative B to 15 percent in Alternative S (the Proposed Action).

Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area; however, the area assigned to these emphases is so small that these impacts on the roadless area as a whole will be very minor. The number of such developments may increase slightly.

Other nonpriced resource values are affected as follows:

Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.

Primitive and semi-primitive recreation opportunities may be adversely affected by vehicle use for range management activities; however, the impacts will not be severe or long-term.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive
Recreation/Custodial

Portions the Cattle Gulch Roadless Area (1-010) are assigned these emphases in all Alternatives except I; from 13 percent in Alternative B to 98 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate. Elk security also will decrease if roading occurs for special uses, mineral development, or to provide access to other management areas, unless adequate road closures are used during the hunting season. Bighorn sheep habitat will be maintained unless roading occurs.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age and size classes will result. Also, by excluding fire, timber-range ecotones become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses, primarily motorized hunting, snowmobiling, and motorcycling, would also be maintained. The amenities of the area could help to support service-oriented business that cater to these recreation activities. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Cattle Gulch Roadless Area (1-010) are assigned these emphases in Alternatives B, F, G, H, W and S; from 62 percent in Alternative S (the Proposed Action) to 71 percent in Alternative F.

The effects of implementing these prescriptions could be expected to be similar, but with a few additional impacts (primarily short-term impacts), to those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation, primarily burning of sagebrush and encroaching Douglas-fir, could be expected, but the impacts would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements may impact the naturalness of the southern portion of the area. The number of such developments in this portion could increase, but the impacts would be localized and minor. Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts in areas that can be seen from major travelways. However, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted if these roads are constructed in view of the highways.

Management activities under these prescriptions should have few, if any, adverse impacts to recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Burning for range improvement on the southern and eastern portions of the roadless area would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses, including motorized recreation, would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-32, 25-14, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

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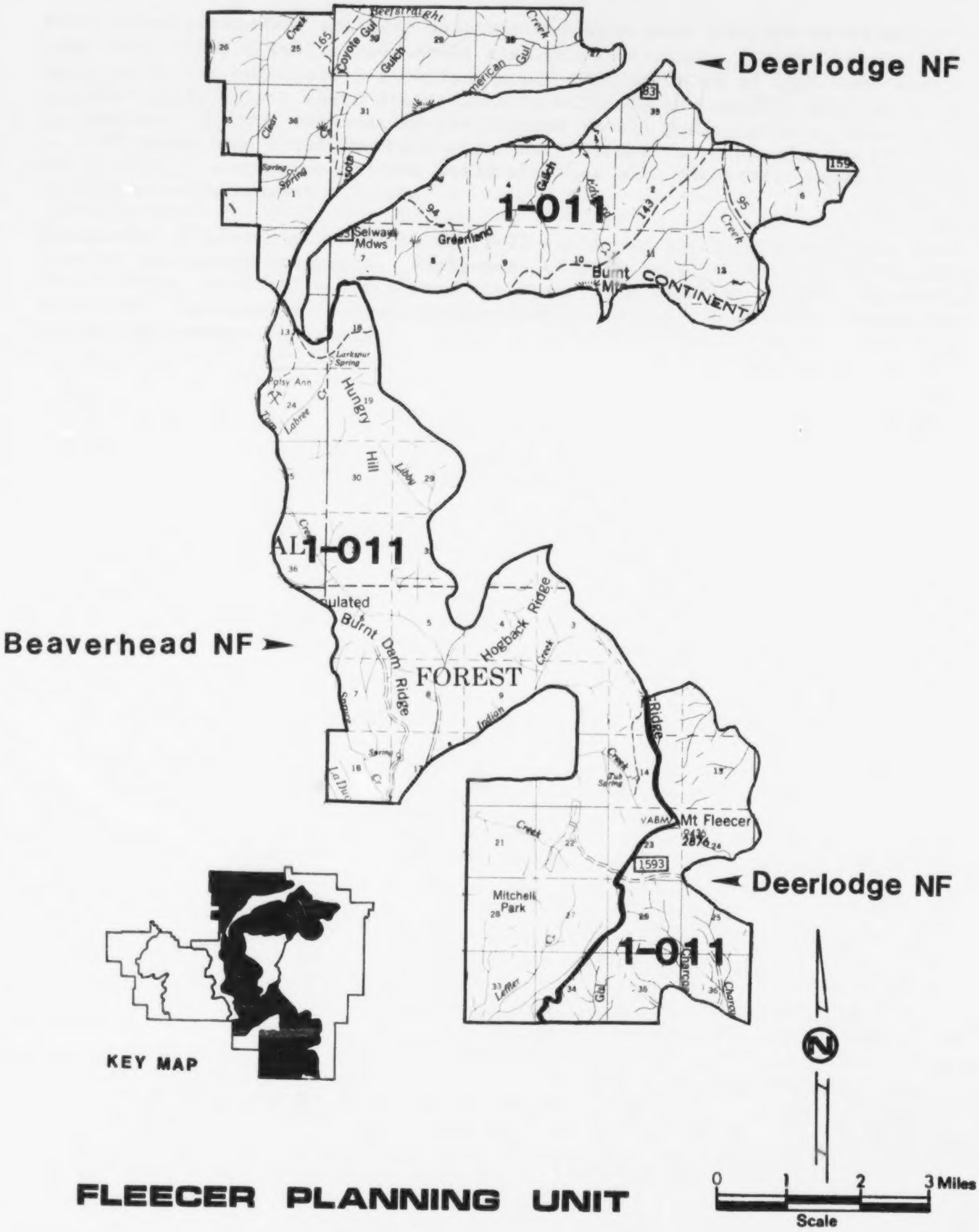
ROADLESS AREA 1-011

FLEECER


Deerlodge NF
1-011
Selway Mdws
Greenland
Burnt Mtn
CONTINENT
Larkspur Spring
Patsy Ann
Hungry Hill
Libby
Beaverhead NF
1-011
Burnt Dam Ridge
Hogback Ridge
FOREST
Mt Fleecer
1593
Deerlodge NF
Mitchell Park
1-011
KEY MAP
0
1
2
3 Miles
Scale

FLEECER PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-011 Fleecer	Gross Acres	Net Acres
1-011 Beaverhead	15,932	15,853
1-011 Deerlodge	21,355	21,355
Total	37,287	37,208

I. DESCRIPTION

The Fleecer Roadless Area of the Beaverhead National Forest is located in the eastern half of the Fleecer Planning Unit bordered on the east by Fleecer ridge and on the north and east by the Deerlodge National Forest. All aspects are represented with east and west aspects predominant. This unit is accessible from all directions and numerous four-wheel-drive roads provide limited access to various parts of the region. Primary access is gained by roads in the upper and lower ends of Jerry Creek. Area 1-011 of the Deerlodge is predominantly situated in Silver Bow County, with small portions in Deer Lodge County. The area is bordered by Interstate #15 to the east, Interstate #90 to the north, Highway #274 further to the west and Highway #43 on the south.

The area is mountainous and steep in places with elevations ranging from approximately 5,700 feet in Jerry Creek to 9,436 at Fleecer Mountain. There is avalanche potential present in the area, but it contains only a few drainages that have been glaciated. Upper Jerry Creek is an undulating basin bounded on the east by steep, well-dissected slopes. The southern tip is strongly dissected; its side slopes contain numerous outcroppings of granite boulders. Drainages in the area are Long Tom and Jerry Creeks. Smaller streams with beaver dams meander through wet willow-covered meadow bottoms. Sagebrush and grass cover the ridges along the east side of Jerry Creek. Lodgepole pine is the major species, but large stands of Douglas-fir grow in lower Jerry Creek and on the slopes of Fleecer Ridge, with scattered stands of Engelmann spruce along creek bottoms. Whitebark pine is common along the highest ridges that surround the unit; north slopes have alpine fir. Grassland parks and meadows appear mainly at lower elevations along the Forest boundary and in two large areas of Hogback and Fleecer Ridges. The area around Burnt Mountain consists of low rolling, relatively flat and heavily timbered hills. The area to the north towards German Gulch is steeper. The Continental Divide intersects the area at the Forest boundary. Drainages in 1-011 of the Deerlodge portion include German Gulch, Greenland Gulch, Edward Creek, Clear Creek, and Spring Creek.

Burnt Mountain (8,383 feet) is the most prominent landmark in the northern section while Mount Fleecer dominates the southeastern section.

Moderately deep, loamy, coarse sands are present generally throughout the area, except on the eastern edge which consists of shallow, rocky silt loams. The area is best known for its excellent elk hunting, althought it receives a wide variety of recreational uses year-round.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Fleecer Roadless Area is surrounded on all sides by highly used recreation and commercial traffic. Logging and wood gathering from existing high standard roads is a major use. These roads penetrate the area from all sides and are open yearlong. Area 1-011 also receives intensive hunter use. Recent mineral activity by Monida Industries has shown a high potential for base metals, which could result in extensive roading in the future. There is an existing phosphate lease in upper Parker Creek which could expand. Also, the Montoro Mining Company has made a major gold discovery north of the area in German Gulch and will be conducting exploratory drilling along the Continental Divide in Delano Creek.

Area 1-011 on the Deerlodge National Forest has retained a high degree of its wilderness characteristics, but with some evidence of man's imprints. Impacts are evident which do detract from its natural qualities. An outfitters camp is located near Burnt Mountain (section 10, T2N, R10W). Section 31 contains a Ranger's cabin and another cabin is constructed in section 3. The cabin floor is a cement slab which creates a high impact. Fences are found throughout the area and approximately 18 miles of trail traverse the area. Mineral developments (phosphate mining) detract from the landscape on Fleecer Ridge, near Beals Hill. Prospecting has been undertaken at Beefstraight Creek and Leffler Creek. Off-road vehicle tracks have caused erosion on Hogback Ridge and Hungry Hill. Livestock grazing is found throughout the area, except in Charcoal Gulch. Vegetative manipulation is found in Crazy Swede Gulch, while old charcoal woodcutting from the turn of the century is evident near Burnt Mountain.

Occasionally when typical westerly winds shift and blow from the north, smoke from a phosphate refinery to the northeast will blow into the lower valleys of the area on the Deerlodge portion.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude are generally considered low to moderate. The area is basically long and narrow; not more than three miles at its widest point in the Beaverhead National Forest. There is little topographic screening found in the various drainages, while vegetative screening is moderate in the several open parks.

There are many permanent off-site intrusions. Highways are visible to the east, north, and west, and a railroad is obvious in the east. Butte and Anaconda are also clearly visible. A phosphate refinery to the northeast often blows smoke into the area. Ranches are located within three miles. Collectively, these developments detract from the area's sense of solitude.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunities for primitive recreation within the area range from low to moderate. The lack of various topographical and vegetative types along with the narrowness of the unit are the principal limiting factors. The area presents few challenges to the recreationist and development both within and outside of the area detract from a primitive recreational experience. Backpacking and hiking are the major activities

D. OTHER FEATURES

The principal attribute of the area is its excellent elk hunting. Good access from three directions provides ready recreation to local people. Most elk are hunted by people from Butte, Anaconda, and the surrounding area; elk hunting is the first association given to the area.

E. WILDERNESS MANAGEABILITY AND BOUNDARIES

Boundaries are capable of being managed as they presently exist; however, portions of the unit open year-long to motorized vehicles could be deleted.

In the Deerlodge portion of 1-011, the boundary cannot be adequately described nor identified on the ground, with the exception of the Fleecer Ridge on the south. There are opportunities to rectify this; movement of the boundary south to the Continental Divide would delete the entire northern section of the area. Presently, the German Gulch corridor penetrates the area. Open parks on the area's boundary and numerous off-road vehicle tracks make the present boundary difficult to manage.

Beaverhead NF		
1977 Inventory Acres	16,800 gross	16,721 net
1983 Inventory Acres	15,932	15,853
Change	- 868	- 868
Reasons for change in inventory:		
Boundary adjustment to meet roadless criteria	- 1051	- 1051
Acreage recalculation:	+ 183	+ 183
Deerlodge NF		
1979 Inventory Acres	21,867	21,867
1983 Inventory Acres	21,355	21,355
Change	- 512	- 512

Change in inventoried acres is due to acre recalculation done in the Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-011 BVHD. VALUE	1-011 DRLG. VALUE	COMBINED VALUE
Acres				
Gross	Acres	15,932	21,355	37,287
Net	Acres	15,853	21,355	37,208
Recreation				
Primitive	RVD'S	200	0	200
SPNM	RVD'S	292	2000	2292
SPM	RVD'S	289	6700	6989
Range				
Existing obligated suitable	Acres	4518	5137	9655
Allotments	# of	1	4	5
AUM'S	AUM'S	1884	1027	2911
Exist. Vacant Suit.	Acres	0	0	0
Allotments	# of	0	0	0
Timber				
Tentative suitable	Acres	9970	8167	18,137
Standing Volume	MBF	56,450	51,502	107,952
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	843	280**	1123
Summer Habitat	Acres	*	21,075**	21,075
Elk				
Winter Habitat	Acres	630	**	630
Deer				
Winter Habitat	Acres	213	**	213
Significant Fisheries				
Stream Miles	Miles	26.7	12	38.7
Stream Habitat	Acres	12.6	22	34.6
Lakes	# of	1	1	2
Lake Habitat	Acres	1	10	11
Water Developments				
Existing	# of	0	0	0

Resource Potentials, continued

Minerals Favorability				
Very High	Acres	0	600	600
High	Acres	7927	2360	10,287
Moderate	Acres	7926	18,395	26,321
Low	Acres	0	0	0
Claims	# of	169	234	403
Oil and Gas Favorability				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	15,853	0	15,853
Low	Acres	0	21,355	21,355
Oil and Gas Leases				
Leased area	Acres	15,853	19,868	35,721
Leases	# of	*	13	13

* Not Available

** Deer and Elk Winter/Summer Habitat acres are included in this total.

---

1. Recreation
This region was determined to receive the highest amount of hunter use of any area in Montana. Because of the close proximity to Butte, Montana, ORV use (four-wheel-drive, motorcycles and snowmobiles) is intensive. This is true especially during hunting season. RVDs have been estimated at 5200 days. There are no developed campgrounds, but outfitter camps are located at S10, T2N, and R10W. The area east of Fleecer Mountain is the winter range for Hunting Area #319.

2. Wildlife
The Fleecer Mountains provide very important spring range and good summer elk habitat for much of the Fleecer herd. There are a few deer and moose. A small amount of elk and deer winter range exists along the Forest boundary on the slopes of the Big Hole River. Black bear and mountain goat have been observed. Upland game birds, such as ruffled, spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk. The area supports fish, but few are of catchable size.

   This area will continue to grow in importance for wildlife if hunting demands increase in the coming years.

3. Water
The Fleecer Roadless Area provides a tributary to the Big Hole River Blue Ribbon trout stream and is a source of drinking water for the city of Butte. Jerry Creek is the major stream that empties into the Big Hole River. There are no lakes of significant acreage.

4. Livestock Operations

Area 1-011 consists of scattered parks of primary range with large areas of secondary range. Clearcuts provide transitory grazing over much of the area. The entire portion of the roadless area lies within the Jerry Creek Permit #38. The Deerlodge portion of the roadless area supports a substantial amount of livestock grazing also, and opportunities exist for livestock increases through spring developments and fencing.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber

Lodgepole pine is the major timber species, but large stands of Douglas-fir are found in lower Jerry Creek and on the slopes of the Fleecer Ridge on the Beaverhead portion of the roadless area. Scattered stands of Englemann spruce grow along creek bottoms at the head of Long Tom Creek. There are approximately 18,137 acres that have been identified as tentatively suitable for timber harvest, 9970 acres on the Beaverhead portion and 8167 acres on the Deerlodge portion of the roadless area.

The timber on the Beaverhead portion of this roadless area is located such that timber harvest would be very expensive, primarily due to high roading costs.

7. Minerals/Oil and Gas

Many small gold and silver mines exist and exploration activity for base metals has increased on Fleecer Mountain and in Mitchell Park in the last few years. Exploration drilling for tungsten has occurred in the Mitchell Park area in the last few years. There is a phosphate lease in Parker Creek.

Geologic favorability for locatable minerals for the Beaverhead portion of area 1-011 is moderate (50%) to high (50%). Geologic favorability for oil and gas is moderate.

Geologic favorability for locatable minerals (Deerlodge portion of area 1-011) is moderate (86%) to high (11%) to very high (3%). Geologic favorability for oil and gas is low.

8. Cultural Resources

The potential for prehistoric and historic cultural resources on the Beaverhead portion of the area is unknown. There has been some cultural resource work done on the Deerlodge portion of the area, but there are few recorded sites. The Deerlodge portion has moderate potential for old mining and logging sites throughout and a high potential for prehistoric sites in the southern portion.

9. Land Use Authorizations

There are no special uses authorized for this area.

10. Non-Federal Lands
There are 79 acres of private land included in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
A low occurrence of fire exists in this area.

2. Insects and Disease
There is a high incidence of spruce budworm present in 1-011.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers
The area is within close proximity of the Anaconda-Pintler Wilderness and within 100 miles of the Lee Metcalf Wilderness. The closest population center over 30,000 is Butte, Montana.

National Forest wilderness and primitive areas (and acres they include) within one day's travel time of Fleecer are:

Absaroka - Beartooth	920,377	Great Bear	286,700
Lee Metcalf	91,021	Gates of the Mountains	28,562
Anaconda - Pintler	157,874	Bob Marshall	1,009,356
Cabinets	94,272	Mission Mountains	73,877
Rattlesnake	20,039	Scapegoat	239,296
Selway - Bitterroot	248,893	Welcome Creek	28,135

2. Contribution to Wilderness Preservation System
This area would contribute geological/ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief. The area also provides opportunities for recreation within a semi-primitive setting and for experiencing a sense of solitude.

3. Public Interest
The Fleecer Mountain Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land management planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the Beaverhead 1977 DEIS. Based on a nonwilderness decision made in the Beaverhead 1978 DEIS, the area was dropped from further study in RARE II. In 1983 the area was again inventoried as roadless in the Forest planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again showed little public support for a wilderness designation in area 1-011.

There has been local concern from snowmobile and trailbike enthusiasists and from people that use the existing substandard trails for wood hauling and cattle distribution. Road closures within and around the area have been a strong local public issue within recent years. During RARE I, this area was inventoried as an Essentially Roadless Area, "Fleecer". The decision in the RARE II FEIS was to manage for nonwilderness/multiple use. There was almost no public comment concerning the consideration of this land for wilderness classification and it was not considered highly controversial.

In public comments on the 1985 Revised Draft EIS and Forest Plan Supplement there was little support for wilderness designation of this area. However, some commentors did express concern for elk security, requesting a decrease in the amount and intensity of timber harvest, particularly in Long Tom and Jerry Creeks.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Management Emphasis by Alternative for the Fleecer Mountain Roadless Area (1-011), Beaverhead Portion

Beaverhead Management Emphasis	Alternative (Net Acres)									
	A CD	B	C	D	F	G	H*	I	W	S** PA
Group 1: 1/	0	0	0	0	0	0	0	15,853	0	0
Group 2: 2/	3170	3488	10,304	1268	9988	4756	3329	0	12,206	3386
Group 3: 3/	0	476	634	159	634	1110	792	0	317	860
Group 4: 4/	12,683	11,730	4439	14,109	4914	9828	11,573	0	2854	6841
Group 5: 5/	0	159	476	317	317	159	159	0	476	4766
BEAVERHEAD TOTAL:	15,853	15,853	15,853	15,853	15,853	15,853	15,853	15,853	15,853	15,853

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

1/ Group 1 is Wilderness emphasis.

2/ Group 2 is Timber emphasis.

3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.

4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.

5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Management Emphasis by Alternative for the Fleecer Mountain Roadless Area (1-011), Deerlodge Portion

Deerlodge Management Emphasis	Alternative (Net Acres)												
	A CD	B	C	D	E	F	G	I	J	K	L	M PA	N
Wilderness: (Relates to Bvhd Group 1, above)	0	0	0	0	0	0	0	0	21355	0	0	0	0
Timber: (Relates to Bvhd Group 2, above)	946	7982	8968	0	8383	8316	8383	0	0	8968	8968	6059	4494
Range: Relates to Bvhd Groups 3 & 5, above)	7062	7215	7399	7209	7215	7215	7215	7309	0	7399	7399	7209	7209
Wildlife: (Relates to Bvhd Group 5, above)	1690	1537	1353	1543	1232	1537	1537	1543	0	1353	1353	1543	1543
Recreation: (Relates to Bvhd Group 4, above)	11657	4621	3635	12603	4525	4287	4220	12503	0	3635	3635	6545	6545
DEERLODGE TOTAL:	21355	21355	21355	21355	21355	21355	21355	21355	21355	21355	21355	21355	21355
ROADLESS AREA TOTAL:	37208	37208	37208	37208	37208	37208	37208	37208	37208	37208	37208	37208	37208

Summary of Management Emphasis, Beaverhead Portion

Management Emphasis	Alternative (Net Acres) A CD*	B	C	D	F	G	H	I	W	S PA**
Roaded:										
Decade 1	3933	4524	3446	0	10,468	5813	3480	0	9970	3480
Decade 5 ***	15,853	15,853	15,853	0	15,853	15,853	15,853	0	15,853	15,853
Roadless:										
Decade 1	11,920	11,329	12,407	15,853	5385	10,040	12,373	0	5883	12,373
Decade 5 ***	0	0	0	15,853	0	0	0	0	0	0
Wilderness:	0	0	0	0	0	0	0	15,853	0	0

* CD is the Current Direction Alternative.
** PA is the Proposed Action Alternative.
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

Summary of Management Emphasis, Deerlodge Portion

Management Emphasis	Alternative (Net Acres) A CD*	B	C	D	E	F	G	I	J	K	L	M PA**	N
Developed:													
Decade 1	305	706	1165	0	1349	706	977	0	0	1086	1165	899	898
Decade 5 ***	946	2605	3393	0	2925	2605	2550	0	0	3582	3393	2688	2789
Roadless:****													
Decade 1	21050	20649	20190	21355	20006	20649	20378	21355	0	20269	20190	.0456	20457
Decade 5 ***	20409	18750	17962	21355	18430	18750	18805	21355	0	17773	17962	18667	18566
Wilderness:	0	0	0	0	0	0	0	0	21355	0	0	0	0

* CD is the Current Direction Alternative.
** PA is the Proposed Action Alternative.
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.
**** Roadless is defined as 5,000 acres or greater in size or any acreage if contiguous to existing wilderness.

Impacts discussed below are for the whole roadless area. For a more complete discussion of the Deerlodge portion, see the Draft EIS for that Forest.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

One hundred percent of the Beaverhead Forest portion of the Fleecer Mountain Roadless Area (1-011) is designated as wilderness in that Forest's Alternative I. (See the Beaverhead Management Emphasis by Alternative for further information about how this portion of the roadless area is assigned by alternative.)

Only Deerlodge Alternative J assigns wilderness management in this roadless area. This alternative assigns 100 percent of the Deerlodge portion of this roadless area to wilderness management. (See the Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the management emphasis assignment of that Forest's portion of this roadless area. Also, a more complete discussion of the Deerlodge alternative impacts will be contained in the Draft EIS issued by that Forest.)

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. This area is contained within the most heavily used hunting districts in Montana and is heavily used by 4 x 4's, trailcycles, and snowmobiles. Most trails and wheeltracks are open yearlong, although snow limits all but snowmobile use during the winter months. Motorized vehicles are restricted to designated routes from October 15th to December 1st. Crosscountry travel vehicle use is permitted during the remainder of the year. Much of the range management is conducted by means of motor vehicles. The existing roads and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Elimination of motorized vehicle use could cause a significant shift of hunters away from the area.

The 18,137 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 108 MMBF in standing volume. This would be a relatively major impact to the Forest's timber program, because most of the harvestable timber is concentrated in lower Jerry Creek and on the slopes of Fleecer Ridge. Although lodgepole is the dominant species, there is a significant amount of Douglas-fir. Roading costs would be high because of the rocky ground.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 2911 AUM's, could continue although management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly. Grazing is a major use of this roadless area, and transitory range provides grazing over much of the area.

The exclusion of timber harvest could significantly decrease the available AUM's as transitory range moves into timber types. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. This could cause a significant impact if hunting pressure was not lessened dramatically by the wilderness designation. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for.

Other nonpriced resource values are affected as follows:

> Wilderness designation could increase the land base in the Wilderness Preservation System and provide ecological diversity in the System.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be large stands of essentially even-aged lodgepole pine interspersed with Douglas-fir. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, particularly outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operator. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access. This could cause a significant shift of hunters away from this area since most of the area hunters use vehicles for access within the area.

Under wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Exploration drilling for tungsten and precious metals has occurred in the past and will continue within and near this area.

Exercise of valid existing rights on 403 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 15,853 acres of oil and gas leases issued with surface occupancy on the Beaverhead portion of the roadless area. There are 19,868 acres leased on the Deerlodge portion. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

From 8 to 77 percent of the Beaverhead portion of this roadless area is assigned to these management emphases in all Beaverhead alternatives but Alternative I. (See the Beaverhead Management Emphasis by Alternative for further information about how this portion of the roadless area is assigned by alternative.)

All Deerlodge alternatives except D, J, and I assign from 4 to 42 percent of the Deerlodge portion of this roadless area to these management emphases.

(See the Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the management emphasis assignment of that Forest's portion of this roadless area. Also, a more complete discussion of the Deerlodge alternative impacts will be contained in the Draft EIS issued by that Forest.)

Timber management will severely impact the wilderness potential particularly in Alternatives C, F, and W. Timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs, and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for primitive and semi-primitive recreation will be severely reduced or eliminated under these prescriptions. This could be a major impact particularly on hunting.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area. In alternatives with high timber harvest (Alternatives C, F, and W) elk may move out of the area to seek security elsewhere until security could be re-established.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required.

Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for hunting, however, timber harvest activities could provide additional opportunities for firewood cutters. Likewise, outfitter and guide operations could be affected by the change in the environment, particularly in Alternatives with high timber designations in this area. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created, however, there may be additional fences needed to control livestock movement in harvested areas.

On the Beaverhead portion of the roadless area, assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

From 1 to 7 percent of the Beaverhead Forest portion of Fleecer Mountain Roadless Area (1-011) is assigned these prescriptions in Alternatives B, C, D, F, G, H, W and S. (See the Beaverhead Management Emphasis by Alternative for further information about how this portion of the roadless area is assigned by alternative.)

Few, if any, acres of the Deerlodge portion of the Fleecer Mountain Roadless Area are assigned these prescriptions. (See the Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the management emphasis assignment of that Forest's portion of this roadless area. Also, a more complete discussion of the Deerlodge alternative impacts will be contained in the Draft EIS issued by that Forest.)

Since so little land is designated for these kinds of uses, the impacts of these prescriptions on the roadless area is extremely limited. Therefore the impacts discussion is combined with that of group 5.

4. Designation: Nonwilderness
Management Emphases: Primitive and semi-primitive
Recreation/Custodial

From 18 to 89 percent of the Beaverhead Forest portion of the Fleecer Mountain Roadless Area (1-011) is assigned these prescriptions in all Alternatives but Alternative I. (See the Beaverhead Management Emphasis by Alternative for further information about how this portion of the roadless area is assigned by alternative.)

All of the Deerlodge alternatives except J assign 17 to 59 percent of that Forest's portion of this roadless area to recreation management emphases. Approximately 30 percent of the roadless area is assigned recreation emphasis in that Forest's Proposed Action. (See the Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the management emphasis assignment of that Forest's portion of this roadless area. Also, a more complete discussion of the Deerlodge alternative impacts will be contained in the Draft EIS issued by that Forest.)

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained; however, opportunities for firewood cutting may decrease. A variety of recreation experiences would be available including hunting and other motorized recreation opportunities. The amenities of the area would continue to support outfitter and guide operations and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

On the Beaverhead portion of the roadless area, assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment to prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

From 1 to 3 percent of the Beaverhead portion of the Fleecer Mountain Roadless Area (1-011) is assigned these emphases in Alternatives B, C, D, F, G, H, and W. Approximately 30 percent in Alternative S (the Proposed Action) is assigned these emphases. (See the Beaverhead Management Emphasis by Alternative for further information about how this portion of the roadless area is assigned by alternative.)

All Deerlodge alternatives but J assign up to 41 percent of the Deerlodge portion of this roadless area to these management emphases. (See the Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the management emphasis assignment of that Forest's portion of this roadless area. Also, a more complete discussion of the Deerlodge alternative impacts will be contained in the Draft EIS issued by that Forest.)

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some larkspur spraying in the Jerry Creek allotment could be expected. These impacts, however, would be relatively minor and short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

On the Beaverhead portion of the roadless area, assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

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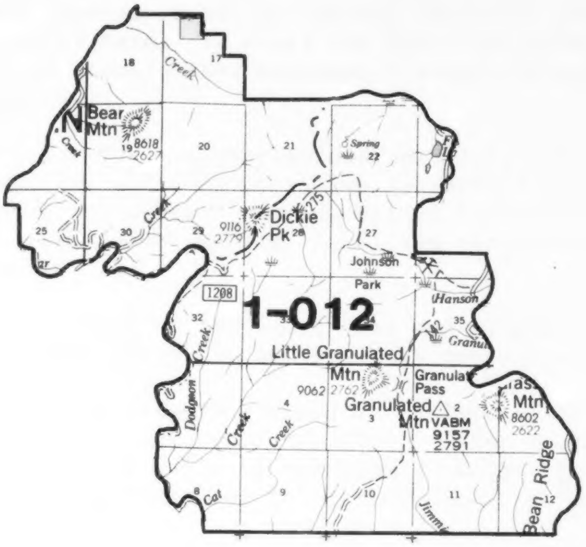
ROADLESS AREA 1-012

GRANULATED MOUNTAIN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17
Bear Mtn
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Spring 22
25
30
Creek
29 9116 2779
Dickie Pk 28
275
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Johnson Park
1208
1-012
32
33
Hanson
35
Little Granulated Mtn
9062 2762
Granulated Pass
Granulated Mtn VABM 9157 2791
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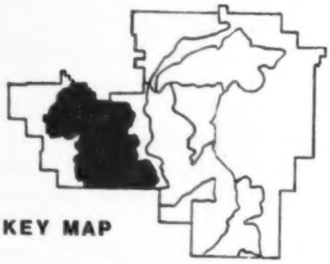
2
3
4
Dodgson Creek
Creek
Creek
8 Cat
9
10
11
12
Bean Ridge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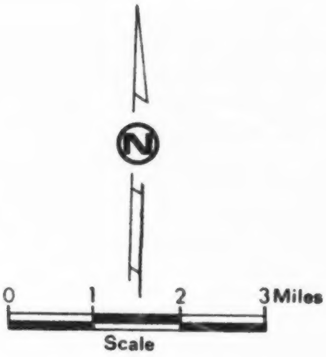

N
0
1
2
3 Miles
Scale

FLEECER PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-012 Granulated Mtn.	Gross Acres	Net Acres
	15,000	14,960

I. DESCRIPTION

The Granulated Mountain Roadless Area is situated in the western half of the Fleecer Planning Unit. It is bordered by developed forest land (timber sales on the east; on the west, Moose Creek and Johnson Creek roads). Car and two-wheel- drive truck access is obtained from improved roads to Bear Creek and Johnson Creek. The remainder of the area is accessible only by 4x4 vehicles, motor-cycles and snowmobiles.

This particular area contains only a few drainages (heads of Johnson Park and New Meadows drainages) that have been glaciated. Lincoln Park is an area of long, gentle footslopes. In the southwestern corner, long, broad footslopes flank the rounded, rocky ridges of Granulated and Little Granulated Mountains. Dickie Peak is the highest point (9,116 feet) in this roadless area. The topography is mountainous and steep in places. Fingers of range reach into this unit from the south. There are no dominant visual features.

Grass/sagebrush cover the area along the southern and western region while alpine and fir-spruce thickets are in the northern part. Appreciable amounts of timber exist, mostly lodgepole pine, whitebark pine, and some spruce and Douglas-fir. Some alpine grassland occurs along the north edge of the area. There is a unique five-acre alpine larch stand on the north side of Granulated Mountain.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Although the intrusions do impact the natural integrity and appearance of the area, these impacts could be lessened with time if the area was managed with travel restrictions. Primary impacts to the naturalness of the area are as a result of current motorized use of the area such as for firewood gathering, cattle distribution, and hunting. Old mining roads and activity are apparent in some locations.

B. OPPORTUNITIES FOR SOLITUDE

Solitude opportunities are available within 3 miles of Johnson Creek or among several mountainous peaks, i.e., Granulated Pass, between Little Granulated Mountain and Grass.

C. PRIMITIVE RECREATION OPPORTUNITIES

Backpacking and primitive camping are readily available, but long, extended hikes are limited because the area is relatively narrow (less than 5 miles wide east to west and 5 miles north to south) and is bounded on all sides by high standard roads.

D. OTHER FEATURES

There is a unique five-acre alpine larch stand on the north side of Granulated Mountain.

E. MANAGEABILITY AND BOUNDARIES

Boundaries could be managed as they are; however, areas with jeep roads along the southern boundary and in Bear Gulch could be deleted. The existing jeep trail to Pinedale cabin has been essentially obliterated with age. Size is ample for a wilderness classification.

1977 Inventory Acres:	14,700 gross	14,660 net
1983 Inventory Acres:	15,000	14,960
Change	+ 300	+ 300

Acreage recalculation resulted in a change of 300 acres in the roadless area.

III. AVAILABILITY

A. RESOURCE POTENTIALS

GRANULATED MOUNTAIN ROADLESS AREA
Area Descriptor: 1-012

CATEGORY	UNIT	VALUE
Gross Acres	acres	15,000
Net Acres	acres	14,960
Recreation		
Primitive	RVD'S	199
SPNM	RVD'S	290
SPM	RVD'S	287
Range		
Existing obligated suitable	Acres	2168
Allotments	# of	2
AUM'S	AUM'S	885
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	10,447
Standing Volume	MBF	57,459
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	2114
Elk		
Winter Habitat	Acres	1100

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	1014
Significant Fisheries		
Stream miles	Miles	23.5
Stream Habitat	Acres	3.5
Lakes	# of	3
Lakes-Habitat	Acres	16
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	2992
Moderate	Acres	11,968
Low	Acres	0
Claims	# of	0
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	14,960
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	13,980

1. Recreation

Dispersed recreation is heavy, especially during hunting season, with highly used motorized recreation along the southern boundary and on Dickie Peak and Johnson Park Trail. Two Forest System Trails are located between Dickie Peak, Johnson Park, and Granulated Mountain; Trail #142 contains 5.5 miles and #275 is 7.5 miles long. Granulated Mountain is part of Hunting Area #319, which is the most heavily hunted area in Montana. The RVDs (recreation visitor days) have been estimated at 4300 per year.

2. Wildlife

The Fleecer Mountains, including the Granulated Mountain area, provide very important spring range and good summer elk habitat for a portion of the Fleecer herd. There are also deer and moose. A small amount of elk and deer winter range exists along the Forest boundary on the slopes of the Big Hole River valley. Black bear and mountain goat have been observed. Upland game birds, such as ruffled, spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk.

3. Water

Water quality is an important feature. This area provides the city of Butte with a source of drinking water and contains a Blue Ribbon trout stream.

4. Livestock Operations

The entire area is within existing livestock allotments and it includes many fence and water developments. Grazing use takes place from July 1 to September 30.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber

There are harvestable timber volumes within the unit. The Wise River District has three sales scheduled for this area within the next ten years.

7. Minerals/Oil and Gas

Geologic favorability for energy resources is moderate. Most of the area has been leased for oil and gas. Geologic favorability for mineral resources is high (20%) to moderate (80%).

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown.

9. Land Use Authorizations

There are two water transmission ditches in Bear Gulch; both are on the north side of Bear Gulch and provide water to the old Howard Johnson homestead.

10. Non-Federal Lands

One parcel of private land in NE 1/4, NW 1/4, Sec. 17, T2N, R11W, totals 40 acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire in this region has not been a major problem.

2. Insect and Disease

There is a high incidence of spruce budworm in the Douglas-fir at lower elevations.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The area is within close proximity of the Anaconda-Pintler Wilderness and within 100 miles of the Lee Metcalf Wilderness. The closest population center over 30,000 is Butte, Montana.

2. Contribution to Wilderness Preservation System

This area would contribute geological/ecological diversity to the National Wilderness Preservation System. Low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief are poorly represented in the System, particularly in the Northern Rocky Mountains.

3. Public Interest

The Granulated Mountain Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land management planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the Beaverhead 1977 DEIS. Based on a nonwilderness decision made in the Beaverhead 1978 DEIS, the area was dropped from further study in RARE II. In 1983 the area was again inventoried as roadless in the Forest planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again showed little public support for a wilderness designation in area 1-012.

There has been local concern for leaving the area undeveloped. Cabin owners in Bear Gulch are opposed to timber sales which would be visible above their locations. Other possible opposition would probably result from snowmobile and trail bike enthusiasts and from people that use the existing substandard trails for wood hauling and cattle distribution.

Other than those who requested wilderness designation for all roadless areas, there were no commentors who specifically supported designation of this area in comments on the 1985 Revised Draft EIS and Proposed Plan Supplement. There was however, continuing concern expressed for protection of elk habitat.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Granulated Mountain Roadless Area (1-012)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: : (Wilderness)	0	0	0	0	0	0	0	14,960	0	0
Group 2: (Timber)	4488	3142	7480	163	10,746	6251	7895	0	10,732	6060
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	748	0	163	0	325	163	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	10,472	9724	7181	14,309	3889	7896	6251	0	3740	7345
Group 5: (High Range, High Wildlife, Mod/Low Range, Wildlife No Timber)	0	1346	299	325	325	488	651	0	488	1555
TOTAL:	14,960	14,960	14,960	14,960	14,960	14,960	14,960	14,960	14,960	14,960

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	983	1131	5019	0	6839	7453	870	0	7333	870
Decade 5 *	14,960	14,960	14,960	0	14,960	14,960	14,960	0	14,960	14,960
Roadless:										
Decade 1	13,977	13,829	9941	14,960	8121	7507	14,090	0	7627	14,090
Decade 5 *	0	0	0	14,960	0	0	0	0	0	0
Wilderness:	0	0	0	0	0	0	0	14,960	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Granulated Mountain Roadless Area (1-012) is designated as wilderness in Alternative I only.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. This area is part of the most heavily hunted district in Montana. Eliminating motorized use would probably be a major impact on the amount of recreation use the area would receive. Heavy hunting pressure could be expected to continue. There are about 15 miles of system trails in this area. These trails are heavily used by snowmobiles and trailcycles and for range management. Established trail systems could be closed to motorized recreational uses, but most would continue to be used for range management in the area.

The 10,447 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 57.5 MMBF in standing volume. Removal of this timber would quite severely impact the timber harvest program for the Wise River Ranger District. Appreciable amounts of timber occur in the Bear Creek, Johnson Creek and Long Tom Creek drainages. Bear Creek and Long Tom Creek currently have main access routes, and access could be attained in the Johnson Creek area. However, roading costs would be relatively high in all of these areas due to the rocky nature of the ground.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 885 AUM's, could continue on the portions of the two allotments involved but management practices need to be replaced or extended. Several improvements critical to maintaining current stocking levels in the Lincoln Park and Jerry Creek Allotments need to be replaced or extended. Opportunities for needed control of larkspur in the Jerry Creek Allotment would be restricted. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game spring and summer range and key habitats, such as meadows in Johnson Park, would be maintained. There is approximately 1000 acres of elk winter range and 1000 acres of deer winter range. These ranges occur along the Forest boundary in Lower Johnson Creek and Cat Creek and would continue to provide necessary forage.

Other nonpriced resource values are affected as follows:

> Much of the western and southern boundary area is visible from Highways #43 and #274. Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in site-specific instances and locations where visual impacts would be limited primarily to range improvements.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity in the System.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be large stands of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones, primarily in the upper Johnson Creek area, will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects for this area center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access. Loss of motorized hunting privileges could severely impact the service-oriented businesses, since hunters may go elsewhere where they can use their vehicles for access to game herds.

With a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Current information indicates no mining claims exist within this area. No impact on wilderness character from the exercise of valid existing rights is anticipated.

As of December, 1983, there were approximately 13,980 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Granulated Mountain Roadless Area (1-012) are assigned these prescriptions in all Alternatives but I; from as little as 1 percent in Alternative D to 72 percent in Alternative F.

Timber management will severely impact the wilderness potential of this area, particularly in Alternatives F and W where 72 percent of the roadless area is allocated to timber management. Timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Timber prescriptions with visual quality objectives of retention/partial retention will probably be assigned along the fringes of the area where cutting units will be visible from major travel routes. There will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Since timber cutting would likely occur in range allotments, range resources could benefit by the creation of transitory range. However, timber harvest may remove natural barriers, requiring additional and costly fencing to maintain intensive management systems. Range activities would not significantly affect the wilderness potential.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> Where timber cutting may occur along Highways #43 and #274, visual quality objectives are retention or partial retention. Impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for primitive and semi-primitive recreation will be severely reduced or eliminated under these prescriptions. Hunting quality may be severely impacted, particularly in Alternatives F and W where 72 percent of the area is assigned to timber management.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area. In Alternatives F and W where a significant amount of the roadless area is allocated to timber management, elk security will be the most severely impacted. In these alternatives elk may move out of this roadless area to seek security cover elsewhere. Or, elk may be concentrated and move from one place to another as harvest occurs.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. In alternatives that designate timber harvest for a significant portion of the area, the change in recreation setting will be disruptive to those publics using the area for primitive or semi-primitive recreation. These publics will, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Timber activities could provide additional access for local residents, and firewood gathering would be possible after timber harvesting activities are completed.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Small portions of the Granulated Mountain Roadless Area (1-012) are assigned these prescriptions in Alternatives B, D, G, and H.

Under these prescriptions, motorized use may increase for range management and recreational purposes. Structural improvements, primarily an increase in water developments, will impact the naturalness of the area. The number of such developments could be expected to increase.

Additional water developments and larkspur spraying could result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

From a social and economic standpoint, benefits would be insignificant because such a small portion of the area is assigned to these uses. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and semi-primitive
Recreation/Custodial

Portions of the Granulated Mountain Roadless Area (1-012) are assigned these prescriptions in all Alternatives but I; from 25 percent in Alternative W to 96 percent (Alternative D).

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow some timber-range ecotones to become dominated by Douglas-fir. Other range in the area is considered to be permanent rangeland.

Since these management emphases maintain the area much like the existing condition, current public uses such as hunting, snowmobiling, and trailbiking would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Small portions of the Granulated Mountain Roadless Area (1-012) are assigned these prescriptions in all Alternatives but I; from as little as 2 percent in Alternatives C, D and F to 15 percent in Alternative S (the Proposed Action).

The effects of implementing these prescriptions could be expected to be similar to, but more impactive than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, primarily larkspur spraying in some portions of the Jerry Creek Allotment, the impacts of which would be minor and short term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use may increase if additional water developments are built. These additional developments will impact the naturalness of the area but impacts will be very localized.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation, such as larkspur spraying, may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

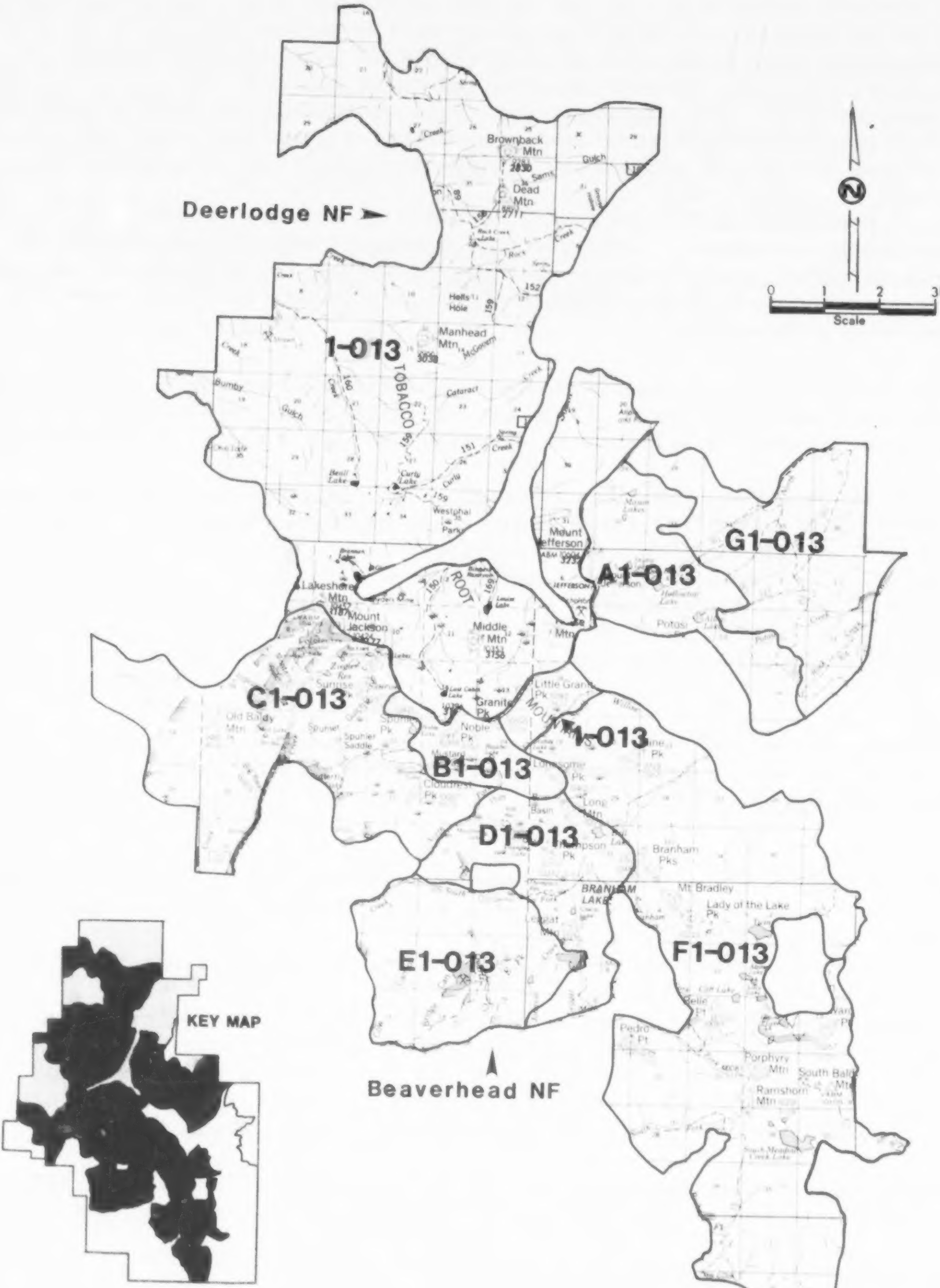
In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated.

Since these management emphases maintain the area much like the existing condition, current public uses, primarily semi-primitive motorized recreation, would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

ROADLESS AREA 1-013

MIDDLE MOUNTAIN


Deerlodge NF
Beaverhead NF
KEY MAP
0 1 2 3Miles
Scale
1-013
A1-013
B1-013
C1-013
D1-013
E1-013
F1-013
G1-013
TOBACCO ROOT MOUNTAINS
Brownback Mtn
Dead Mtn
Hells Hole
Manhead Mtn
Cataract
Westphal Park
Mount Jefferson
Lakeshore Mtn
Mount Jackson
Middle Mtn
Granite Pk
Little Granite Pk
Noble Pk
Old Baldy Mtn
Spuhler Pk
Spuhler Saddle
Cloudrest Pk
Lonesome Pk
Branham Pks
BRANHAM LAKES
Mt Bradley
Lady of the Lake Pk
Potosi
Pedro Pt
Porphyry Mtn
Ramshorn Mtn
South Baldy Mtn

TOBACCO ROOT PLANNING UNIT

Roadless Area Name: Middle Mountain Tobacco Roots	Gross Acres	Net Acres
Beaverhead National Forest:		
1-013	721	721
A1-013	5,353	5,353
B1-013	1,710	1,710
C1-013	11,342	10,388
D1-013	3,693	3,665
E1-013	6,237	6,018
F1-013	22,965	22,801
G1-013	7,680	7,680
Beaverhead Total	59,701	58,336
Deerlodge National Forest:	37,761	34,991
GRAND TOTAL	97,462	93,327

I. DESCRIPTION

The Tobacco Roots Range is an isolated range surrounded by broad, flat valleys on all sides. The Middle Mountain Tobacco Root RARE II area 1-013 makes up the central portion of the Tobacco Root Range and is segmented into eight specific areas: 1-013, A-G1-013. Generally the area is very rugged and diverse, containing many mountain peaks in excess of 10,000 feet and glacial lakes. Access is easily obtained to any one of these units from many roads and trails leading into these mountains. B1-013 is located in the headwaters of Indian Creek and probably has the most rugged topography of any of these areas. Concentrated in this portion are the high peaks (9,000 feet and over) and the glacial cirque basin of the headwaters of Indian Creek. The northeast section (C1-013) has steep rocky cirque headwalls, steep side slopes and glacial trough valleys. The highest point is Mt. Jackson at 10,380 feet. In the southeast there are unglaciated foothills. Mill Creek occupies a fairly large glacial valley and the Mill Creek road borders E1-013. Area F1-013 is again strongly glaciated with steep, rocky cirque headwalls and steep sidewalls. Branham Peaks is the highest point at 10,482 feet. The northeast corner (G1-013) has broad gently rolling uplands with steep, strongly dissected foothills along the Forest boundary. Glacial activity is evident throughout these areas.

Most soils are sandy loams derived from metamorphic rocks, chiefly gneiss. Soils in the northeast corner are very coarse, derived from granitic rocks, and in the northwest corner (A1-013) are shallow and rocky.

Vegetative cover on lower elevation slopes is grassland, sagebrush and juniper with scattered patches of timber. Mid elevations are forested; lodgepole pine, Douglas-fir, and Engelmann spruce dominate. Whitebark pine grows at higher elevations and alpine vegetation occurs above timberline. Small, wet meadows are found throughout the area. Surrounding these areas, elevations are lower and have a more gentle terrain.

The Mill Creek road (E1-013) provides access to the heavily used Branham Lakes at the fringe of the alpine zone.

The Middle Mountain Tobacco Roots portion of the Deerlodge Forest is situated in southwestern Montana southeast of Butte, northeast of Dillon, and west of Bozeman. It is located entirely within Madison County.

This area is very rugged with several high peaks. Mount Jefferson is the highest peak at 10,604 feet. It also contains eight small named lakes. Precipitation varies from 14 inches at the bottom to 50 inches at higher elevations.

Approximately 45 percent of the area is classified as commercial Forest. Most of this commercial Forest land (60 percent) is termed marginal. Lodgepole and limber pine with spruce are the principal tree species. The high peaks in the area are well above timberline.

The principal attractions of the area are mining and recreation. Much early-day mining activity occurred in this area, especially along the Deerlodge-Beaverhead Forest divide and in the South Boulder drainage. It is also visited for its notable scenic qualities.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPFARANCE

In localized areas, natural integrity has been degraded by development; however, natural integrity and appearance is still high because of the area's size and ruggedness. Also, sights and sounds of any developments surrounding these areas are at a minimum due to the low population residing in the Tobacco Root Range and adjacent valleys.

The natural appearance of Area 1-013 has been altered by historic mining activity sites with wagon trails and primitive jeep roads. It is composed of very scattered timber with steep elevations and open areas of rock. This area is moderately used by the public for 4x4 vehicular travel to higher elevation lakes and vistas.

Area A1-013 has moderate to steep slopes, which are heavily timbered and negotiable by the hiker to reach high elevation lakes and vistas. Its appearance at the highest elevations remains relatively free from any man-induced disturbances, but as slopes lessen, evidences of old mining claims, jeep trails and heavy motorbike use are visible.

Area B1-013's portion of the Middle Mountain Tobacco Roots has remained natural in appearance because of the ruggedness of the terrain. There are few places where the imprint of man is evident.

Although Area C1-013 contains outstanding scenery, particularly in the many mountain lakes and high, rugged peaks, its surface is completely broken by numerous mining claims and private acres with ensuing 4x4 roads. Remains of miner's cabins and mine tailings are not uncommon.

Area D1-013--the majority of this area is above-timberline rock, with subalpine timber growth, providing rugged and natural scenery with little man induced impact. As elevations are lower, the influence of man becomes apparent from mining activity and recreational roads, especially in an area near Branham Lakes which is a popular recreation site.

Area E1-013's natural integrity has been difficult to maintain because of the necessity for access to private claims or high elevation recreational areas. As is typical of the roadless areas in the Tobacco Root Range, higher elevations provide more isolation from the influences of human activity.

Area F1-013 receives use from both recreation and mining. The areas around Twin Lakes and South Meadow Lakes have considerable recreational traffic. Four-wheel-drive roads provide access to most lakes in this vicinity, detracting from the natural appearance. Although it is difficult to escape these man-made intrusions, a high ridge runs through the central portion of the area which provides a more primitive setting with limited access.

Area G1-013--there are slowly diminishing evidences of historical timber activity in the southeast region of this unit, but the majority of the unit is very natural appearing. It is gently forested and interspersed with glacial potholes. It has not been heavily used by man, except for permittees who graze cattle on this land.

Area 1-013 Deerlodge - This area has retained a high degree of wilderness characteristics, with little evidence of man's imprints. Some impacts are noticeable, but do not detract from the natural qualities. Old mining activities and prospecting are the most prominent disturbances and are found throughout. Livestock grazing and fencing are scattered over a large portion, but are predominantly up the Boulder River (northeast corner and on the east side). A reservoir is situated in the Boulder River drainage, plus an unimproved road, but both can be separated from the roadless area. Approximately 36 miles of trail and one stock driveway traverse the area.

B. OPPORTUNITIES FOR SOLITUDE

In Area 1-013 opportunities for solitude rank low due to the short distance from the perimeter to the core of the area. Its acreage contains little more than one square mile. There are scattered timber stands with open areas of rock which allow some solitude.

Area A1-013--isolation can be obtained in this area in the more heavily timbered regions of Skytop Lake and Hollowtop Mountain, however these opportunities are less frequent due to the close proximity of access roads used by fishermen, campers, and outfitters. Except in some of the basins, man's activity is apparent throughout most of the area. This is probably one of the more frequently visited areas because of its aesthetic qualities.

The small size of Area B1-013 is the only attribute that limits the opportunities for solitude and primitive recreation. Topographic screening and rugged terrain provide good opportunities for solitude and primitive recreation experiences.

Area C1-013--because of steep terrain near Jackson Reservoir, it is more unlikely to encounter area visitors than in the region around Ziegler Reservoir, but the opportunity for solitude in the majority of the area is greatly influenced by the level of mining activity in the area on patented and unpatented mining claims and accompanying roads.

Area D1-013 contains less road intrusion than some of the units in the Tobacco Root Range and therefore provides more solitude especially above timberline. The area is well dissected topographically and offers good screening. Human use is concentrated in the Branham Lake vicinity.

In Area E1-013 solitude is difficult to obtain because of surrounding developments. It is not particularly well-screened or dissected topographically. Primitive roads, trails, and private claims continue to threaten possibilities of isolation.

Area F1-013 has a good opportunity for solitude due to its considerable size, diversity of topography, and nonmotorized nature especially away from the more heavily-used lake region. Numerous mountain peaks over ten thousand feet offer excellent opportunities for a feeling of isolation.

Area G1-013 provides opportunities to be isolated from man's activities in its gently sloping forested mountain regions. The fact that it has little potential for popular recreational purposes contributes to its solitude. Few roads and trails penetrate this unit and those that do are gradually disappearing.

Area 1-013 Deerlodge provides many good opportunities for visitors to experience a sense of solitude--one of the principal attributes of wilderness. Some of the area's features do detract from this sense of solitude. Opportunities for solitude within the area are rated as high. Topographical screening is rated high with its many mountains and ridges, while vegetative screening is rated moderate. The distance from the perimeter to the core is from three to five miles. While there are permanent off-site intrusions visible from mountain tops, they do not detract significantly from the sense of solitude.

C. PRIMITIVE RECREATION OPPORTUNITIES

Area 1-013 has a combination of clear streams, small lakes, alpine plants and rugged peaks that provide choice recreational settings for fishing, hunting, backpacking and nature appreciation.

Area A1-013, with its outstanding aesthetic qualities, challenging terrain and clear mountain lakes attract many visitors to this area for high quality recreation. Fishing, hunting, backpacking, and nature appreciation are the primary pursuits, while Hollowtop Mountain provides opportunities for technical climbing. Old mining roads are heavily used by four-wheel-drive units and motorbike use is becoming increasingly popular in the area.

Area B1-013 provides excellent opportunities for primitive recreation, particularly mountain climbing and hiking. The rugged terrain and high elevation mountain peaks provide a challenge to all but well experienced mountain climbers.

Area C1-013--access routes to Jackson Lake receive considerable use in the summer for primitive pastimes; the combination of clear streams, small lakes, alpine plants and rugged peaks provide choice recreational settings for fishing, hunting, backpacking and nature appreciation.

Area D1-013--motorized traffic (including snowmobiles and motorbikes) is prohibited or restricted to designated routes in many locations in this area. The majority of the region is in an alpine zone and the combination of clear streams, small lakes, alpine plants and rugged peaks provide choice recreational settings for fishing, hunting, backpacking and nature appreciation.

Area E1-013 recreation is semi-primitive in nature. The Mill Creek road bordering the south edge of this area provides access to Branham Lakes at the fringe of the alpine zone. Mill Creek, Balanced Rock and Branham Lakes, plus several small, undeveloped campsites are located along this road. Camping, hiking, hunting, and fishing are major recreation activities. Snowmobiling and motorbiking are also common to this area.

Area F1-013 opportunities for primitive recreation are available at higher elevations and the combination of clear streams, small lakes, alpine plants and rugged peaks provide choice recreational settings for fishing, hunting, backpacking and nature appreciation. At lower elevations, the area ranks as moderate due to outside visible impacts of roads, mining and heavy public use near South Meadow, Twin and Cliff Lakes.

Area G1-013 does not offer a high degree of opportunity for challenge for most visitors, but it does provide quality nonmotorized recreation with adequate vegetative screening to provide isolation from disturbances.

Area 1-013 Deerlodge--opportunities for primitive recreation are rated as high and this is one of the predominant uses of the area. In addition to the high rating for solitude, the area offers many challenges with a moderate diversity of recreational experiences.

D. OTHER FEATURES

There are some special geologic features in the alpine regions of A1-013, B1-013 and D1-013. Mountain goats are found along the high crest of B1-013. The area affords opportunities to view glaciated peaks, cirques and cirque lakes, providing the viewer a high degree of visual quality unavailable in the more uniform landscape of the surrounding areas at lower elevations. It is an important attribute because it is representative of high alpine country in a largely unaltered natural condition.

The area's rugged appearance draws many recreationists to the Deerlodge National Forest's 1-013. Scenic views from mountains of surrounding mountain ranges provide excellent recreational opportunities.

E. MANAGEABILITY AND BOUNDARIES

Most of the area, especially at lower elevations, is marred by existing mining claims, private lands, and numerous substandard roads and trails. Oil and gas leases cover the entire region. This intermingled private land ownership presents the need to acquire and restore these lands if a wilderness is desired because exclusion by boundary adjustments would be difficult and resulting size would become a factor.

During the RARE II process, an area of 1,710 acres was recommended for wilderness study (B1-013). That boundary excluded all private land, but, in places, would still be difficult to locate. The rugged terrain of B1-013 somewhat isolates it from the remaining areas of 1-013.

Future hardrock mineral development is the main uncertainty to addressing manageability because existing laws allow for the exploration and development of hardrock minerals. The Tobacco Roots have long had a mining history.

Area 1-013 of the Deerlodge National Forest has satisfactory manageability characteristics. Boundary lines tend to follow mountain ridges. Exceptions to this include the Boulder River valley corridor intrusion and parts along the northern and eastern boundary. Limited access from the north and east should not produce significant problems.

Beaverhead NF		
1977 Inventory Acres:	66,200 gross	65,173 net
1983 Inventory Acres:	59,701	58,336
Change	- 6499	- 6837
Reasons for inventoried acre change:		
Existing Timber Sale and roads	- 6484	- 6484
Acreage Recalculation	- 15	- 353

Deerlodge NF		
1977 Inventory Acres:	38,100	34,640
1983 Inventory Acres:	37,761	34,991
Change	- 339	+ 351

Change in inventoried acres is due to acre recalculation done in the Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-013 VALUE	A1-013 VALUE	B1-013 VALUE	C1-013 VALUE	D1-013 VALUE	E1-013 VALUE	F1-013 VALUE	G1-013 VALUE	1-013 Drlg VALUE	COMBINED VALUE
Acres											
Gross	Acres	721	5353	1710	11,342	3693	6237	22,965	7680	37,761	97,462
Net	Acres	721	5353	1710	10,388	3665	6018	22,801	7680	34,991	93,327
Recreation											
Primitive	RVD's	9	60	22	131	46	76	287	97	0	728
SPNM	RVD's	13	87	31	191	67	111	418	141	1600	2659
SPM	RVD's	13	86	31	189	67	110	414	140	2000	3050
Range											
Existing obligated suitable	Acres	43	103	0	3793	761	3754	4607	3208	25,859	42,128
Allotments	# of	1	1	2	2	3	2	6	1	*	8*
AUM's	AUM's	25	49	0	582	241	1141	1411	1237	555	5241
Existing vacant suitable	Acres	0	0	0	0	0	0	0	0	0	0
Allotments	# of	0	0	0	0	0	0	0	0	0	0
Timber											
Tentative suitable	Acres	17	2085	21	3228	691	2329	5758	4586	7029	25,744
Standing Volume	MBF	105	11,109	124	18,043	3190	12,920	31,167	25,541	44,634	146,833
Corridors											
Existing/Potential	# of	0	0	0	0	0	0	0	0	1 (P)	1
Wildlife T&E											
Bald Eagle	Acres	0	0	0	0	0	0	0	0	0	0
Big Game											
Winter Habitat	Acres	721	2047	1710	5424	3665	3258	15,825	3948	597***	37,195
Summer Habitat		**	**	**	**	**	**	**	**	34,404***	34,404
Elk											
Winter Habitat	Acres	0	0	0	1076	0	101	1028	2764	***	4969
Deer											
Winter Habitat	Acres	0	0	0	856	0	59	0	745	***	1660
Significant Fisheries											
Stream Miles	Miles	1.1	4.7	2.8	18.2	1.6	5.9	22.6	13.9	53	123.8
Stream Habitat	Acres	0	0	0	4.5	0	1.8	1.4	.2	98	105.9
Lakes	# of	1	5	1	9	10	2	18	5	16	67
Lake Habitat	Acres	2	35	6	59	65	6	211	30	80	494
Water Developments											
Existing	# of	0	4	3	5	4	0	6	4	0	26
Minerals											
Very High	Acres	721	2199	513	1500	367	602	6867	0	0	12,769
High	Acres	0	2199	1197	8888	3298	5416	11,382	2534	1178	36,092
Moderate	Acres	0	955	0	0	0	0	4552	5146	21,402	32,055
Low	Acres	0	0	0	0	0	0	0	0	12,411	12,411
Claims	# of	56	17	18	87	21	56	115	6	296	672
Oil and Gas Potential											
Very High	Acres	0	0	0	0	0	0	0	0	0	0
High	Acres	0	0	0	0	0	0	0	0	0	0
Moderate	Acres	0	0	0	0	0	0	0	0	2390	2390
Low	Acres	721	5353	1710	10,388	3665	6018	22,801	7680	32,601	90,937
Oil and Gas Leases											
Leased area	Acres	0	2208	0	8128	65	3978	5144	2760	14,544	36,827
Leases	# of	*	*	*	*	*	*	*	*	5	5

* Portions of allotments may be contained in several roadless areas. The combined values display total allotments occurring across a group of areas.

** Not Available

*** Deer and Elk Winter/Summer Habitat acres are included in this total.

1. Recreation

The entire Middle Mountain Tobacco Root Roadless Area is popular for hiking, camping, trail cycling, 4x4 driving, rock climbing, snowmobiling, firewood gathering and prospecting. Hunting use throughout the higher elevations is rated low due to the relatively remote and rugged status of much of the area.

Area 1-013--four-wheel-drive roads are moderately used in this area for recreation driving.

Area A1-013 recreation ranges from primitive to motorized. Summertime motorbike and four-wheel-drive use is heavy while at higher elevations there are excellent challenges for cross-country travel, nature appreciation, fishing and hunting on the subalpine ridges.

Area B1-013 is so rugged that very few (less than 50 RVDs per year) use the area for hiking, hunting or mountain climbing.

Area C1-013 four-wheel drive roads are moderately used for recreation driving.

In most locations of Area D1-013, motorized vehicle use is prohibited providing more primitive recreational activities.

Area E1-013 recreation is more semi-primitive in nature, with considerable activity from snowmobiles and trailbikes.

Area F1-013 contains mountain peaks in excess of 10,000 feet and in addition to a more primitive high elevation recreation, a permit for helicopter skiing was issued in this area in 1983.

Area G1-013 is not heavily used for recreational purposes, but it does provide good opportunity for a more primitive experience, especially hunting.

Area 1-013 Deerlodge--visitors to this area are primarily interested in primitive recreation experiences of hiking, backpacking, and nature appreciation and identification.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are elk, mule deer, moose, mountain lion, and mountain goat. Upland game birds, such as the ruffled, spruce, and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the areas, especially raptor species such as the golden eagle and ferruginous hawk.

Area B1-013 supports the major habitat for the mountain goat herd along the Tobacco Root crest.

3. Water

Natural water turbidity is low and all continuous flowing streams support fisheries. Active irrigation dams under Forest Service special use permit occur on Twin, Jackson, Sunrise, Hill and Noble Lakes. The town of Sheridan obtains part of its domestic water supply from Indian Creek which is located in E1-013. Numerous small lakes occur in the high basins. Water quality throughout the Tobacco Root Range is considered to be excellent.

4. Livestock Operations

Most of the suitable grassland is managed under intensive grazing systems; there are portions of 8 grazing allotments contained in the area which provide summer range for many local ranching operations. Livestock grazing is permitted on the range from the middle of June through October.

5. Ecology

Upper elevations exhibit mostly subalpine fir/whitebark pine habitats while the lower elevations contain Douglas fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber

Commercial timber sales have been limited to small clearcuts and selective cuts. Small quantities of firewood, post and poles have been harvested in the areas. Most cutover lands are now stocked with poles and small-sized sawlog timber.

7. Minerals/Oil & Gas

The Tobacco Root Mountains are extensively mineralized and have a long history of mining activity for base and precious metals. Past producing mining districts are scattered throughout the area. There has been a great deal of recent mineral activity and many acres of land are patented.

Geologic favorability for locatable minerals for the Beaverhead portion of area 1-013 is very high for approximately 25 percent of the area; high for approximately 55 percent of the area and moderate for approximately 20 percent of the area. Geologic favorability for oil and gas is low.

Geologic favorability for locatable minerals (Deerlodge portion of area 1-013) is high for approximately 5% of the area; moderate for approximately 60% of the area and low for approximately 35% of the area. Geologic favorability for oil and gas is low (93%) to moderate (7%).

Portions of the roadless areas within the Tobacco Roots have been leased for oil and gas.

8. Cultural Resources

There are no identified historic or prehistoric cultural sites except old mining remnants in the area.

9. Land Use Authorizations
There are more than a dozen constructed special use irrigation dams on high mountain lakes. Twin, Jackson, Sunrise, and Noble Lakes in C1-013 and Hill Reservoir in D1-013 are a few of the larger dams.

10. Non-Federal Lands
Private land in this roadless area totals 1365 acres. Area C1-013 contains the largest percentage with 954 acres. Area D1-013 has 28 acres, E1-013 has 219, and F1-013 contains 164 acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
The entire area has had low fire occurrence due to cool, moist summer and fall conditions. The fuels situation would primarily be downed woody materials in areas affected by the pine beetle.

2. Insect and Disease
Presently, infestations of the pine beetle are occurring in lodgepole pine stands throughout the area.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The moderately used Anaconda-Pintler Wilderness is located approximately 60 miles due west of the Middle Mountain Tobacco Root Roadless Area. Butte and Helena are the nearest major communities to the area.

National Forest wilderness and primitive areas within one day's travel time of the areas include:

Absaroka - Beartooth	920,377 acres
Anaconda - Pintler	157,874
Bob Marshall	1,009,356
Cabinets	94,272
Gates of the Mountains	28,562
Great Bear	286,700
Lee Metcalf	91,021
Mission Mountains	73,877
Rattlesnake	20,039
Scapegoat	239,296
Selway - Bitterroot	248,893
Welcome Creek	28,135

2. Contribution to Wilderness Preservation System
This area would contribute ecological/geological diversity to the National Wilderness Preservation System.

3. Public Interest
In RARE I the central acreage of the Middle Mountain Tobacco Root Roadless Area was inventoried as roadless in three portions; Thompson Peak #47, Ramshorn Mountain #50, and Middle Mountain Tobacco Root #10. The remainder was inventoried as essentially roadless. Area B1-013

(1,760 acres) was selected for further wilderness study and the 1978 Beaverhead Proposed Land Management Plan allocated the remaining areas to other resource management.

As a result of the RARE II study, B1-013 was designated as a Further Planning area. In 1983 the portion of the areas remaining roadless after timber sale and road activity was once again inventoried, and the wilderness potential of the areas were evaluated in the Forest planning process.

Public interest in a wilderness designation for this roadless area has been high. Most who commented remarked about the scenic high elevation, nonmotorized recreation values, with numerous lakes and excellent wildlife habitat. The majority of those who responded to this area felt that it should be wilderness because of high recreation values.

Opposition has come from those who favor no wilderness in Montana or are concerned about the area's mineral potential.

In 1985 comments, those who supported the "Conservationist Alternative" or other environmentalist viewpoints again sought wilderness designation of a substantial part of the Beaverhead National Forest 1-013 and a smaller portion the the Deerlodge National Forest 1-013 contiguous area. Although these commentors recognize the existence of mining activity and "primitive vehicle trails", they cite the natural integrity and solitude created by the area's size and rugged topography, the numerous "classically beautiful" alpine lakes, and the "high quality primitive recreation activities" as providing more than sufficient rationale for wilderness designation of the Middle Mountain Tobacco Root Area.

Opponents of wilderness classification in this area expressed interest in retaining options for mineral development, grazing opportunities, and motorized access to alpine lakes, as well as opportunities for other relatively primitive recreation experiences in an area not classified as wilderness.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Management Emphasis by Alternative for the Middle Mt. Tobacco Root Roadless Area (1-013), Beaverhead Portion

Beaverhead Management Emphasis		Alternative (Net Acres)									
		A CD	B	C	D	F	G	H*	I	W	S** PA
Group 1: 1/	1-013	0	0	721	721	721	0	0	721	721	0
	A1-013	0	0	5353	5353	0	0	0	5353	5353	0
	B1-013	***	0	1710	1710	1710	0	0	1710	1710	0
	C1-013	0	0	10,388	10,388	0	0	0	10,388	0	0
	D1-013	0	0	3665	3665	0	0	0	3665	3665	0
	E1-013	0	0	6018	6018	0	0	0	6018	6018	0
	F1-013	0	0	22,801	22,801	22,801	0	0	22,801	22,801	0
	G1-013	0	0	7680	7680	0	0	0	7680	7680	0
Group 2: 2/	1-013	173	180	0	0	0	180	0	0	0	0
	A1-013	1766	1445	0	0	1338	390	1071	0	0	0
	B1-013	0	0	0	0	0	0	0	0	0	0
	C1-013	1039	312	0	0	4155	519	208	0	3636	289
	D1-013	311	0	0	0	1283	0	0	0	0	0
	E1-013	632	120	0	0	1203	0	0	0	0	0
	F1-013	798	2280	0	0	0	456	2280	0	0	2154
	G1-013	3494	1920	0	0	3072	1536	3072	0	0	60
Group 3: 3/	1-013	0	0	0	0	0	0	0	0	0	0
	A1-013	0	0	0	0	0	0	0	0	0	13
	B1-013	0	0	0	0	0	0	0	0	0	0
	C1-013	0	104	0	0	0	208	0	0	0	0
	D1-013	0	0	0	0	0	0	0	0	0	0
	E1-013	0	602	0	0	0	903	0	0	0	0
	F1-013	0	0	0	0	0	0	0	0	0	0
	G1-013	0	1920	0	0	0	1920	0	0	0	570
Group 4: 4/	1-013	548	541	0	0	0	541	721	0	0	721
	A1-013	3587	3372	0	0	4015	4695	4282	0	0	5340
	B1-013	0	0	0	0	0	1539	1710	0	0	1710
	C1-013	9349	6232	0	0	5194	8311	8310	0	4155	8945
	D1-013	3354	2566	0	0	2199	2932	3042	0	0	3665
	E1-013	5386	5175	0	0	3611	4513	4814	0	0	6018
	F1-013	22,003	19,153	0	0	0	21,205	18,241	0	0	19,308
	G1-013	4186	3072	0	0	2688	3456	1536	0	0	4292
Group 5: 5/	1-013	0	0	0	0	0	0	0	0	0	0
	A1-013	0	536	0	0	0	268	0	0	0	0
	B1-013	0	1710	0	0	0	171	0	0	0	0
	C1-013	0	3740	0	0	1039	1350	1870	0	2597	1154
	D1-013	0	1099	0	0	183	733	623	0	0	0
	E1-013	0	121	0	0	1204	602	1204	0	0	0
	F1-013	0	1368	0	0	0	1140	2280	0	0	1339
	G1-013	0	768	0	0	1920	768	3072	0	0	2758
BEAVERHEAD TOTAL:		58.336	58.336	58.336	58.336	58.336	58.336	58.336	58.336	58.336	58.336

* Land designations are the same for H, HA and H(dept); therefore, only H is displayed.

** Land designations are the same for S and SA; therefore, only S is displayed.

*** In Alternative A, area B1013 is designated as Furthur Planning.

1/ Group 1 is Wilderness emphasis.

2/ Group 2 is Timber emphasis.

3/ Group 3 is High Range, High Range with Low Intensity Wildlife, No Timber emphasis.

4/ Group 4 is Primitive/Semi-primitive Recreation Custodial emphasis.

5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis.

Management Emphasis by Alternative for the Middle Mt. Tobacco Root Roadless Area (1-013), Deerlodge Portion

Deerlodge Management Emphasis	Alternative (Net Acres)												
	A CD	B	C	D	E	F	G	I	J	K	L	M PA	N
Wilderness: 1/	0	0	0	0	34991	34991	34991	34991	34991	34991	34991	0	0
Timber: 2/	0	1337	1337	0	0	0	0	0	0	0	0	149	149
Range: 3/	2119	3750	3750	3613	0	0	0	0	0	0	0	3750	3750
Wildlife: 4/	6508	4877	29904	5014	0	0	0	0	0	0	0	4877	4877
Recreation: 5/	26364	25027	0	26364	0	0	0	0	0	0	0	26215	26215
DEERLODGE TOTAL	34991	34991	34991	34991	34991	34991	34991	34991	34991	34991	34991	34991	34991
ROADLESS AREA TOTAL:	93327	93327	93327	93327	93327	93327	93327	93327	93327	93327	93327	93327	93327

1/ Relates to Beaverhead Group 1, on previous page.
2/ Relates to Beaverhead Group 2, on previous page.
3/ Relates to Beaverhead Groups 3 and 5, on previous page.
4/ Relates to Beaverhead Group 5, on previous page.
5/ Relates to Beaverhead Group 4, on previous page.

Summary of Management Emphasis, Beaverhead Portion

Management Emphasis	Alternative (Net Acres)									
	A CD*	B	C	D	F	G	H	I	W	S PA**
Roaded:										
Decade 1	1661	1911	0	0	2043	5758	1470	0	5758	1470
Decade 5 ***	26,294	22,921	0	0	33,104	16,198	19,937	0	10,388	15,809
Roadless:										
Decade 1	56,675	56,425	0	0	31,061	52,578	56,866	0	4630	56,866
Decade 5 ***	32,042	35,415	0	0	0	42,138	38,399	0	0	42,527
Wilderness:	0	0	58,336	58,336	25,232	0	0	58,336	47,948	0

* CD is the Current Direction Alternative.
** PA is the Proposed Action Alternative.
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

****

Summary of Management Emphasis, Deerlodge Portion

Management Emphasis	Alternative (Net Acres)												
	A CD*	B	C	D	E	F	G	I	J	K	L	M PA**	N
Developed													
Decade 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Decade 5 ***	0	0	0	0	0	0	0	0	0	0	0	0	149
Roadless ****													
Decade 1	34991	34991	34991	34991	0	0	0	0	0	0	0	34991	34991
Decade 5 ***	34991	34991	34991	34991	0	0	0	0	0	0	0	34991	34842
Wilderness	0	0	0	0	34991	34991	34991	34991	34991	34991	34991	0	0

* CD is the Current Direction Alternative
** PA is the Proposed Action Alternative
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.
**** Roadless is defined as 5,000 acres or greater in size or any acreage if contiguous to existing wilderness.

B. Impacts

Impacts discussed below are for the whole roadless area. For a more complete discussion of the Deerlodge portion, see the Draft EIS for that Forest.

1. Designation: Wilderness
Management Emphasis: Wilderness

Between 43 and 100 percent of the Middle Mountain Tobacco Root Roadless Area, Beaverhead portion, is assigned these management emphases in Alternatives C, D, F, I, and W. Alternatives C, D, and I are the alternatives in which the 100 percent assignment of this area to wilderness occurs. In Alternative A, the Current Direction Alternative, B1-013, the RARE II further planning part of the Beaverhead area, is assigned to an emphasis which protects the wilderness characteristics much as if that area were assigned to a wilderness prescription. In Alternative S, the Beaverhead Proposed Action, none of the Middle Mountain Tobacco Root Roadless Area is assigned to wilderness management. (See Beaverhead Management Emphasis by Alternative Table for information about how each individual portion of the roadless area has been assigned by alternative.)

One hundred percent of the Middle Mountain Tobacco Root Roadless Area, Deerlodge portion, is assigned wilderness management emphasis in Deerlodge alternatives E, F, G, I, J, K and L. None of the Deerlodge portion of this roadless area is assigned to the wilderness emphasis in that Forest's Proposed Action. (See Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts on the Deerlodge portion of this roadless area will be contained in the Draft EIS issued by that Forest.)

Wilderness can enhance the areas' wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. Many of the roads in this area are very primitive and were developed for early mining. Thus, these roads have historical significance. Much of the existing motorized use of the area is still associated with mineral exploration and development, and prior rights would allow continued use of this access. There is one primitive road up Quartz Creek that has been used for access to post and pole harvest areas and mining claims. Some primitive roads have been used in the past to access alpine lakes for construction of reservoir embankments. These roads are currently receiving some use by four-wheel drive vehicles. There is also a primitive road up Indian Creek to the old, and long-closed Sunbeam and Occidental mines. Many of these roads and trails, other than those presently associated with mining access or range management, could be closed and used for foot travel to the high mountain lakes and other places of interest in these areas.

The 5796 to 25,744 acres of land tentatively suitable for timber production would not be available under this prescription, depending on the alternative chosen. This would remove from 31 MMBF to 147 MMBF in standing volume, again depending on the alternative selected. On the Beaverhead portion of the roadless area, much of the timber is located in area G1-013. Some timber also occurs in steep, rocky country where units of suitable timber are scattered and volumes per acre are low. Harvesting in these areas would be extremely costly because of the miles of roads needed to access these isolated pockets of timber and the high costs of roading this type of ground. Timber on the lower fringes of the area could be accessed. Most of the timber in the Deerlodge portion of the roadless area lies on the periphery of the area.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 5241 AUM's, is a significant use and could continue on the portions of the allotments involved. Most of the use, 4686 AUM's, occurs on the Beaverhead portion of roadless area and involves portions of 8 allotments. Presently, some permittees use vehicles to access and manage livestock within affected allotments. Other permittees manage stock within these areas on horseback. If wilderness designation were to preclude use of motorized vehicles to manage their stock, some permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Grazing systems now in effect would continue. Present facilities are adequate for management of range allotments. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource. Few opportunities exist to increase livestock on the Deerlodge portion of the roadless area.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations of elk, deer, and mountain goats would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas may be lost over time to timber encroachment in some areas. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> On the whole, visual quality would be retained. The assigned "preservation" VQO would allow ecological changes only, except in small, site-specific instances and locations where visual impacts from development of existing mineral rights occur.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System and add primitive recreation experiences.
>
> Roadless hunting experiences would be maintained.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger

trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Wilderness precludes timber harvest (but not existing mineral development) and the timber industry would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to some grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. When the current oil and gas leases expire, the area would be withdrawn. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 672 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 36,827 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

From 4 to 19 percent of the Beaverhead's portion of the Middle Mountain Roadless Area 1-013 is assigned these management emphases in Alternatives A, B, F, G, H, W and S. The least amount of the Beaverhead's portion of the area is assigned to these emphases in Alternative S, the Beaverhead Proposed Action; the most in Alternative F (20 percent). (See Beaverhead Management Emphasis by Alternative Table for information about how each individual portion of the roadless area has been assigned by alternative.)

Four percent of the Deerlodge portion of the Middle Mountain roadless area 1-013 is assigned to timber management emphasis in Deerlodge Alternatives B and C. Only 149 acres of the Deerlodge portion are assigned to timber management in that Forest's Proposed Action. (Because so little of this roadless area on the Deerlodge is assigned these emphases, and because the timber on that portion occurs primarily on the fringes of the area, the following impacts relate more to the Beaverhead portions than they do the the Deerlodge portion of the area. See Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts on the Deerlodge portion of this roadless area will be contained in the Draft EIS issued by that Forest.)

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which would become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

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Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> Some opportunities for primitive and semi-primitive recreation, primarily backpacking and motorbiking, may be reduced or eliminated under these emphases.
>
> Elk security will be reduced in the short-term where existing stands are harvested. The degree of these security cover losses between alternatives will relate to the magnitude of the timber harvest in the area.
>
> Water quality and fisheries may be adversely affected, depending on where the harvests are to take place, but effects would be mitigated to the extent possible in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These emphases provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area would be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded in some areas where transitory range is created.

On the Beaverhead portion of Roadless Area 1-013, assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and
   High Intensity Range and Low Intensity Wildlife)

Only 5 percent of the Beaverhead portion of the roadless area is assigned these emphases in Alternatives B and G. The Proposed Action assigns no acres to these emphases. (See Beaverhead Management Emphasis by Alternative Table for information about how each individual portion of the roadless area has been assigned by alternative.)

Six to eleven percent of the Deerlodge portion of this roadless area is assigned range management emphases in Deerlodge Alternatives A, B, C, D and N. Approximately 11 percent of the area is assigned to range management in that Forest's Proposed Action. (See Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts on the Deerlodge portion of this roadless area will be contained in the Draft EIS issued by that Forest.)

Since so little of this roadless area is assigned these emphases, the impacts from management activities would be minimal. Therefore, the impacts information is combined with the impacts for other range acitivities in part 5. Designation: Nonwilderness, Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian, below.

4. Designation: Nonwilderness
   Management Emphases: Primitive and semi-primitive
   Recreation/Custodial

Between 7 and 86 percent of the Beaverhead portions of the Middle Mountain Tobacco Root Roadless Area are assigned these emphases in Alternatives A, B, F, G, H, W and S. The highest percentages occur in Alternatives A and G, and the lowest in Alternative W. The Tobacco Root Recreation Area is included in this grouping in Alternative S, the Beaverhead Proposed Action. (See the Beaverhead Management Emphasis by Alternative Table for information about how each individual portion of the roadless area has been assigned by alternative.)

Deerlodge Alternatives A, B, and D allocate from 72 to 75 percent of their portion of the roadless area to these management emphases. That Forest's Proposed Action assigns approximately 75 percent of their portion of Roadless Area 1-013 to these management emphases. (See Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts on the Deerlodge portion of this roadless area will be contained in the Draft EIS issued by that Forest.)

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Wildlife populations of elk, deer, moose, and mountain goats will remain at present levels or increase.
>
> Roadless hunting experiences would be provided.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax, and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would continue to be available including primitive, semi-primitive nonmotorized, and motorized recreation. Primitive recreation experiences occur primarily along the crest of the Tobacco Roots and at alpine and subalpine lakes. Motorized vehicles (4x4's) are used for touring and to access fishing areas in the lower elevations of this roadless area. Snowmobile use occurs throughout the area. The amenities of the area would continue to support outfitter and guide operations and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under custodial management would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

On the Beaverhead portion of the roadless area, assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Between 5 and 16 percent of the Beaverhead portion of the Middle Mountain Tobacco Root Roadless Area is assigned to these management emphases in Alternatives B, F, G, H, W and S. Alternatives B and H assign the largest percentage and Alternative W assigns the least. The Proposed Action assigns 9 percent to these management emphases. (See Beaverhead Management Emphasis by Alternative Table for information about how each individual portion of the roadless area has been assigned by alternative.)

Deerlodge Alternative A assigns these management emphases to approximately 19 percent of that Forest's portion of the roadless area. Deerlodge Alternative C assigns these management emphases to 85 percent of the Deerlodge portion of the roadless area. The Proposed Action for that Forest assigns these emphases to approximately 14 percent of their portion of the roadless area, as does Alternatives B, D and N. (See Deerlodge Management Emphasis Assignment by Alternative, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts on the Deerlodge portion of this roadless area will be contained in the Draft EIS issued by that Forest.)

Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities, for the most part would continue at present levels and would not significantly affect wilderness potential. Vegetative manipulation and other improvements may also improve wildlife habitat, and maintain or increase the wildlife opportunities.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities may be adversely affected.

Habitat for moose, bears, mountain goats, and deer will not be affected.

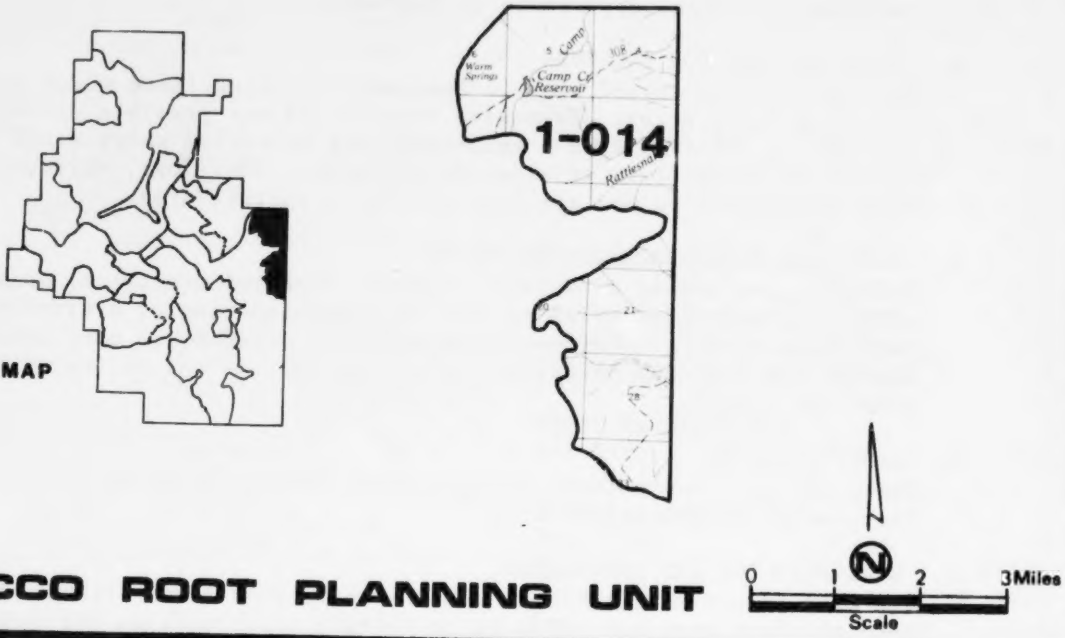
In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Under the riparian management, there will be opportunities to improve fisheries habitat.

Since these management emphases maintain the area much like the existing condition, current public uses such as touring, fishing, wood gathering, hunting, and snowmobiling, would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

On the Beaverhead portions, assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

ROADLESS AREA 1-014

POTOSI



TOBACCO ROOT PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-014 Potosi	Gross Acres	Net Acres
	5,465	5,465

I. DESCRIPTION

The Potosi Roadless Area is located on the eastern slopes of the Tobacco Root Mountains between the Forest boundary on the east and South Willow Creek on the west. The North Meadow Creek Road forms the southern boundary. Access is from the North Meadow Creek Road; the South Willow Creek Road and via a low standard road on the South Fork of Hot Springs Creek.

This area contains a broad, gently undulating upland, with steep, strongly dissected foothills along the Forest boundary. Elevations range from 6,000 feet to 8,400 feet. The terrain is relatively gentle when compared to most of the Tobacco Root Mountains.

Soils are very coarse, sandy loams and loamy sands derived from granitic rocks.

The area is generally forested with lodgepole pine and Douglas-fir the dominant species. Small parks are interspersed throughout the area.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

A low standard jeep trail runs through the area and has been used by 4-wheel-drive vehicles for many years. Within the area, impacts to the natural integrity are primarily old mining activities and range and water developments. Because of the small size of the area, these impacts lessen the overall natural appearance of the area.

B. OPPORTUNITIES FOR SOLITUDE

The figure-eight-shaped area is composed of two portions which are each less than 3,500 acres. Extensive travels are not possible within this area nor is the area like a self-contained ecosystem which would allow a visitor to escape from external development. Therefore, solitude and other wilderness values are less available in this area.

C. PRIMITIVE RECREATION OPPORTUNITIES

The area, consisting of several smaller, forested mountains, does not offer challenging experiences such as mountaineering or a diverse, scenic recreation setting. Recreation experiences offered are more oriented to hiking, hunting, and motorized recreation vehicle use on low-standard roads and trails.

D. OTHER FEATURES

There are no known notable topographical, geographical or cultural features in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

The area is not manageable as wilderness because it is bisected by roads and its shape does not allow it to provide opportunities for solitude or a feeling of separation from non-wilderness activities. The area is also separated from other Forest roadless areas (G1-013 and F1-013) by roads and other Forest development.

1977 Inventory Acres:	9200 gross	9200 net
1983 Inventory Acres:	5465	5465
	- 3735	- 3735
Reasons for inventory acre change:		
Existing Timber Sale and roads	- 3836	- 3836
Acreage Recalculation	+ 101	+ 101

III. AVAILABILITY

A. RESOURCE POTENTIALS

POTOSI ROADLESS AREA
Area Descriptor: 1-014

CATEGORY	UNIT	VALUE
Gross Acres	acres	5465
Net Acres	acres	5465
Recreation		
Primitive	RVD'S	69
SPNM	RVD'S	101
SPM	RVD'S	99
Range		
Existing obligated suitable	Acres	2887
Allotments	# of	2
AUM'S	AUM'S	1106
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	3066
Standing Volume	MBF	18,184
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	4759
Elk		
Winter Habitat	Acres	1655

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	3104
Significant Fisheries		
Stream miles	Miles	4.4
Stream Habitat	Acres	2.4
Lakes	# of	1
Lakes-Habitat	Acres	5
Water Developments		
Existing	# of	11
Minerals Favorability		
Very High	Acres	0
High	Acres	2733
Moderate	Acres	2732
Low	Acres	0
Claims	# of	8
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	0
Low	Acres	5465
Oil and Gas Leases		
Leased area	Acres	0

1. Recreation

Heaviest recreation use occurs in the fall during big game season. The area is popular to hunters, campers, and snowmobilers. Firewood gatherers frequent the area.

Under a wilderness designation, the vehicle-oriented recreation would cease. Snowmobiling, which is relatively popular in this area, would be precluded, as would motorized hunting and firewood gathering.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, and black bear. Upland game birds, such as ruffled, spruce, and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit this roadless area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and the ferruginous hawk. There are no fisheries in this unit.

3. Water

Water is limited to Camp Creek Reservoir and several springs used for livestock watering.

4. Livestock Operations

Two grazing allotments blanket this unit and provide forage for about 1106 AUM's of capacity for ten permittees.

5. Ecology

Upper elevations exhibit mostly subalpine fir/whitebark pine habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

6. Timber

There are approximately 3,000 acres of suitable timber. Part of the acreage is presently under contract to be harvested. Post and pole cutters frequent the area.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is high for half of the area and moderate for the other half. Geologic favorability for oil and gas is low.

8. Cultural Resources

Cultural resources include evidence of several old mining operations. A very old cabin exists in the NE 1/4 section 28, T3S, R2W.

9. Land Use Authorizations

There are no land use authorizations.

10. Non-Federal Lands

There are no non-Federal lands in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

At the present time there has been a low incidence of fire. However, with the epidemic of mountain pine beetle in the lodgepole pine, fire activity should be expected to increase. Spruce budworm is also attacking the Douglas-fir. Without some harvesting this mortality would add to the fire problem.

2. Insect and Disease
See previous page, Fire.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The Lee Metcalf Wilderness is within 10 to 15 miles of this roadless area and receives low to moderate use, except in the high-use area of Spanish Peaks. Bozeman is about 50 miles away and Butte about 70 miles. These two cities supply most of the visitors to this area.

2. Contribution to Wilderness Preservation System
This area would contribute geological/ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
Area 1-014 was inventoried in RARE I only as an essentially roadless area and was not selected for wilderness study in that process. The 1978 Beaverhead Final EIS designated the area for nonwilderness uses; however, the decision was made to further study the wilderness potential of the area in the RARE II process. The area was designated as nonwilderness in the RARE II Final EIS and managed for resource uses other than wilderness. In 1983 the portion of the area remaining roadless after timber sale and road activity was once again inventoried, and the wilderness potential of the area is being evaluated in the Forest planning process.

Public interest in a wilderness designation for this roadless area has been low-to-moderate. Most who commented remarked about the high scenic and wildlife values, the variety of habitat provided by the unit, the wildflowers, and the watershed values present in the roadless area.

Although there was little interest expressed in the 1985 comments on the Revised Draft EIS and Plan Supplement for wilderness designation of this area, a few commentors did express concern about timber harvest in 1-014. They said that previous harvesting had removed enough or too much timber and the rest was needed to retain wildlife, scenic, and recreation values.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Potosi Roadless Area (1-014)

Management Emphases	A	B	C	D	F	G	H*	I	W	S**
	Alternative (Net Acres)									
Group 1: (Wilderness)	0	0	0	0	0	0	0	5465	0	0
Group 2: (Timber)	2732	2459	2186	0	1365	1640	2186	0	1093	1368
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	0	0	0	0	0	0	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial	2733	273	3279	5465	274	547	1093	0	273	1190
Group 5: High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	2733	0	0	3826	3278	2186	0	4099	2907
TOTAL:	5465	5465	5465	5465	5465	5465	5465	5465	5465	5465

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* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	A	B	C	D	F	G	H	I	W	S
	Alternative (Net Acres)									
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	5465	5465	5465	0	5465	5465	5465	0	5465	5465
Roadless:										
Decade 1	5465	5465	5465	5465	5465	5465	5465	0	5465	5465
Decade 5 *	0	0	0	5465	0	0	0	0	0	0
Wilderness:	0	0	0	0	0	0	0	5465	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Potosi Roadless Area (1-014) is designated wilderness in Alternative I only.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of established range and mineral use, could be eliminated. Established trail systems, other than those used primarily for range and mineral development and management, could be used for foot travel to the places of interest in the area.

Vehicle-oriented recreation would cease. Snowmobiling, which is fairly popular in this area, would be precluded, as would motorized hunting and firewood gathering.

The 3066 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 18.2 MMBF in standing volume, primarily in the South Fork of Hot Springs Creek and the South Willow Creek drainages.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 1106 AUM's, could continue on the portions of the two allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained, except that timber would eventually encroach upon some of these areas. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity in the System.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be prohibited under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and new mineral exploration, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 8 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were no oil and gas leases issued in this area. No impact on wilderness character from the exercise of rights granted to lessees or assignees is anticipated.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

The Potosi Roadless Area (1-014) is assigned these prescriptions in all Alternatives except D and I; from 20 percent in Alternative W to 50 percent in Alternative A.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which would become available for grazing. However, timber harvest may remove natural barriers, requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.

In areas where visual quality objectives are retention or partial retention, impacts will be evident but less evident than those created by more intensive timber management activities.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.

Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a lower level of security cover than currently exists.

Water quality and fisheries would be adversely affected but effects would be partially mitigated in accordance with Forest standards and guidelines.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphasis: Range

No acreage within this Roadless Area was allocated to these emphases under any alternative.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive
Recreation/Custodial

The Potosi Roadless Area (1-014) is assigned these prescriptions in all Alternatives but I; from as little as 5 percent in Alternative B to 100 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Potosi Roadless Area (1-014) are assigned these prescriptions in Alternatives B, F, G, H, W and S; from 40 percent in Alternative H to 75 percent in Alternative W.

The effects of implementing these prescriptions could be expected to be similar to those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Under the riparian management, there will be opportunities to improve fisheries habitat.

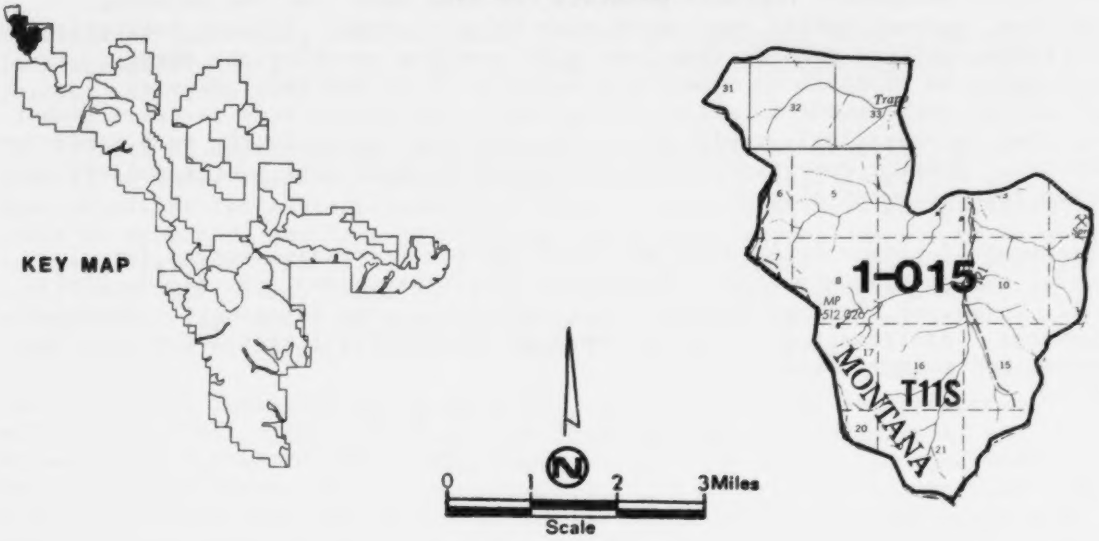
Burning for range improvement would maintain timber-range ecotones in approximately the present proportions of sagebrush and Douglas-fir. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

ROADLESS AREA 1-015

BEAR CREEK



LIMA PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-015 Bear Creek	Gross Acres	Net Acres
	8,252	8,252

I. DESCRIPTION

The Bear Creek Roadless Area is located approximately 45 miles south of Dillon, Montana. It extends from the Forest boundary in the vicinity of South Frying Pan Creek on the north to the head end of Bear Creek on the south. It borders the Continental Divide on the west. It is accessed from dirt jeep roads off the county road in the Horse Prairie area.

The area is rolling foothills with high rugged terrain along the Divide. Elevation ranges from 7,200 feet in Bear Creek to 9,400 feet along the Continental Divide.

Deep, incised, V-shaped canyons, separated by narrow rounded ridgetops characterize the area. Canyon sideslopes are long, moderately steep, and smooth to slightly undulating. Valley bottoms are very narrow and most of the area is steep valley sideslopes. Major drainages flow to the northeast and east creating strong aspect differences on opposite valley sidewalls. A few small rocky glacial cirques lie just below the Divide, but the area has not been strongly glaciated.

Except for mountain meadows, grassy parks along stream bottoms and glacial cirques, the vegetative cover is mostly lodgepole pine and Douglas-fir with whitebark pine and subalpine occurring at the higher elevations.

Most soils are moderately deep, rocky loams. On the gentler slopes, under heavy forest, soils have a loam or fine sandy loam surface layer and a clay loam subsoil. Shallow, rocky loams with a thin silt loam surface occur along the Continental Divide.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The natural integrity of this area has been impacted by range developments, many wheel tracks, and mining claims. However, overall the area retains its natural appearance of rolling foothills with high rugged terrain along the Divide. The surrounding area is sparcely populated, rural community or adjacent, Forest and BLM lands.

B. OPPORTUNITIES FOR SOLITUDE

Some topographic diversity is provided by the rolling foothills and in the rugged mountainous country near the Continental Divide. Opportunities for solitude are available in the canyons and valleys; however, travels up to the Divide are limited to less than 5 miles in length.

C. PRIMITIVE RECREATION OPPORTUNITIES

There are no major destination points within the area. The area does possess some challenging terrain in the mountainous areas nearing the Continental Divide. Scenic highpoints in the area offer panoramic views of adjacent, sparcely populated valleys.

D. OTHER FEATURES

There are no notable topographical, geological or cultural features in this area.

E. MANAGEABILITY AND BOUNDARIES

The Bear Creek Roadless Area could be managed as wilderness and could be combined with adjacent Roadless Area 1-944 (Goat Mountain) to create a larger unit. As a combined unit, it would be almost completely surrounded by private and BLM ground and would require extensive posting.

1977 Inventory Acres:	8900 gross	8900 net
1983 Inventory Acres:	8252	8252
Change	- 648	- 648

Reasons for change in inventoried acreage:

Existing Timber Sale and roads	- 469	- 469
Acreage Recalculation	- 179	- 179

III. AVAILABILITY

A. RESOURCE POTENTIALS

BEAR CREEK ROADLESS AREA
Area Descriptor: 1-015

CATEGORY	UNIT	VALUE
Gross Acres	acres	8252
Net Acres	acres	8252
Recreation		
Primitive	RVD'S	104
SPNM	RVD'S	152
SPM	RVD'S	150
Range		
Existing obligated suitable	Acres	2023
Allotments	# of	3
AUM'S	AUM'S	199
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	4812
Standing Volume	MBF	27,640
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	205
Elk		
Winter Habitat	Acres	0

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	0
Significant Fisheries		
Stream miles	Miles	2.2
Stream Habitat	Acres	1.6
Lakes	# of	3
Lakes-Habitat	Acres	5
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	8252
High	Acres	0
Moderate	Acres	0
Low	Acres	0
Claims	# of	81
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	8252
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	1590

1. Recreation
Hunting is the most prevalent recreational use of this area; however, opportunities for hiking, camping, riding, sightseeing and winter sports also occur.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, pronghorn, mountain lion, and black bear. Sporadic gray wolf (an endangered species) activity has been recorded for the area in the 1970's and 1980's. Upland game birds, such as sage, spruce, and blue grouse are also found in the area. Except for the gray wolf, no threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk. Major streams are populated with trout, predominantly brook trout.

3. Water

Bear, North Frying Pan, and South Frying Pan Creeks are tributaries to Horse Prairie Creek which lies northwest of this roadless area.

4. Livestock Operations

Most of the suitable area is grazed by cattle from July through September of each year. Portions or all of three grazing allotments are included in this roadless area. Bear Creek and North Black Canyon are under intensive management systems, and are intensively developed. South Black Canyon will be placed under intensive management in 1985.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas. Lower elevation grass and sagebrush lands are representative of grass and grass/sagebrush steppes.

6. Timber

There are 4,812 acres of suitable timber with 27.6 MMBF of standing volume in this roadless area.

7. Minerals/Oil and Gas

Geologic favorability for oil and gas is moderate; part of the area is leased for oil and gas. Geologic favorability for locatable minerals is very high. Extensive deposits of thorium have been identified. Prospecting, underground exploration, and exploration drilling have occurred in the past and are expected to continue.

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown. However, past Indian use of the general area suggests that sites may exist.

9. Land Use Authorizations

There are no noncompatible uses authorized for this area.

10. Non-Federal Lands

There are no non-Federal lands.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire, insects and disease have created only minor impacts in this roadless area.

2. Insect and Disease

Potential for insect infestation and disease in the timber is relatively low.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers

The nearest wilderness area is the Anaconda-Pintler Wilderness which is moderately used at the present time. This roadless area is a long distance from major population centers. The nearest centers having a population of over 30,000 are Butte, Bozeman and Idaho Falls.

2. Contribution to Wilderness Preservation System

Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

3. Public Interest

The Bear Creek Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land managment planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-015. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was not large enough, had no special wilderness qualities, and was roaded.

In public comments of the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was little specific support expressed for wilderness designation of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Bear Creek Roadless Area (1-015)

Management Emphases	A	B	C	D	F	G	H*	I	W	S**
	Alternative (Net Acres)									
Group 1: (Wilderness)	0	0	8252	0	0	0	0	8252	0	0
Group 2: (Timber)	2063	2311	0	0	4706	2063	2888	0	3052	2657
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	990	0	0	80	330	0	0	370	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	6189	4786	0	4950	3466	5694	4951	0	4090	5091
Group 5: (High Range, High Wildlife, Mod/Low Range, Wildlife, No Timber)	0	165	0	3302	0	165	413	0	740	504
TOTAL: 1-015	8252	8252	8252	8252	8252	8252	8252	8252	8252	8252

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* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	A	B	C	D	F	G	H	I	W	S
	Alternative (Net Acres)									
Roaded:										
Decade 1	1198	1378	0	0	1473	1770	1060	0	1707	1060
Decade 5 *	8252	8252	0	0	8252	8252	3108	0	8252	3108
Roadless:										
Decade 1	7054	6874	0	8252	6779	6482	7192	0	6545	7192
Decade 5 *	0	0	0	8252	0	0	5144	0	0	5144
Wilderness:	0	0	8252	0	0	0	0	8252	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Bear Creek Roadless Area (1-015) is assigned to wilderness in Alternatives C and I.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing jeep trails and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 4812 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 28 MMBF in standing volume, primarily lodgepole pine and Douglas-fir at midslopes.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 199 AUM's, could continue on the portions of the three allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems in Bear Creek and North Black Canyon would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved as jeep trails disappear. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity in the System.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate. Security for the transitory gray wolf would be provided and the prey base maintained.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality of Bear, and Frying Pan Creeks would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, and so on, will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would be maintained in a roadless setting although vehicle use would not allowed.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. This area has very high geologic favorability for thorium.

Exercise of valid existing rights on 81 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 1,590 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

From 25 to 37 percent of the Bear Creek Roadless Area (1-015) is assigned to these prescriptions in Alternatives A, B, G, H, W and S. Alternative F assigns 57 percent of the area to these prescriptions.

Intensive timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area. The portion of the area impacted would be primarily within the Bear Creek drainage.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers, requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification, man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> The opportunities for primitive and semi-primitive recreation in the Bear Creek drainage will be severely reduced or eliminated under these

prescriptions. Hunting, the most prevalent use, could continue, although the increase in access could reduce the quality of the hunt.

Elk security will be reduced in the short-term when existing stands are harvested. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area could be adversely affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. This area has very high geologic favorability for thorium.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

From one to twelve percent of the Bear Creek Roadless Area (1-015) is assigned these prescriptions in Alternatives B, F, G, and W. At most, the acreages are in several pieces located along the eastern periphery of the area.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retained or partially retained. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.
>
> Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because of the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

Between 42 and 75 percent of the Bear Creek Roadless Area (1-015) is assigned these prescriptions in all Alternatives except C and I. The acreage is generally a consolidated stringer stretching along the Continental Divide.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not be significantly affected.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including the current uses of hiking, camping, riding, and sightseeing. The amenities of the area would continue to support outfitter and guide operations and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. This area has very high geologic favorability for thorium.

5. Designation: Nonwilderness
   Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Two to nine percent of the Bear Creek Roadless Area (1-015) is assigned these prescriptions in Alternatives B, G, H, W and S. Alternative D assigns 40 percent of the area to these prescriptions. The acreages would be in scattered pieces within the eastern portion of the area.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

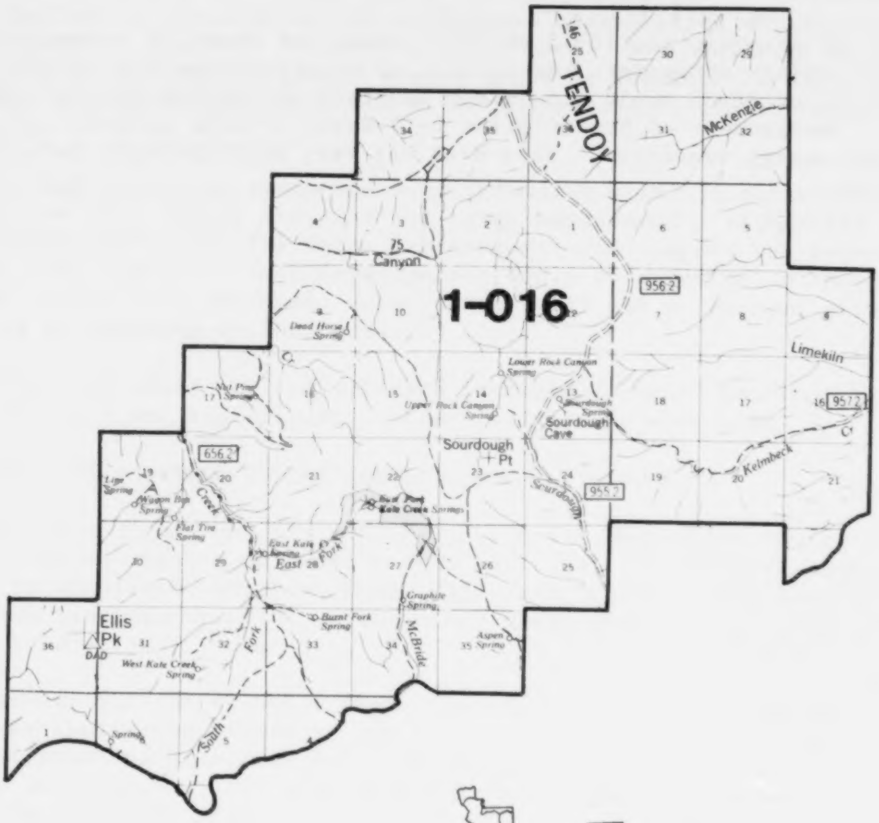
> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. In alternative D, the tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. This area has very high geologic favorability for thorium.

ROADLESS AREA 1-016

McKENZIE CANYON


1-016
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McKenzie
Canyon
Limekiln
Kelmbeck
Sourdough
Sourdough Pt
Sourdough Cave
Sourdough Spring
Lower Rock Canyon Spring
Upper Rock Canyon Spring
Dead Horse Spring
Nut Pine Spring
Lime Spring
Wagon Box Spring
Flat Tire Spring
Creek
Burnt Fork Kate Creek Springs
East Kate Creek Spring
East Fork
Burnt Fork Spring
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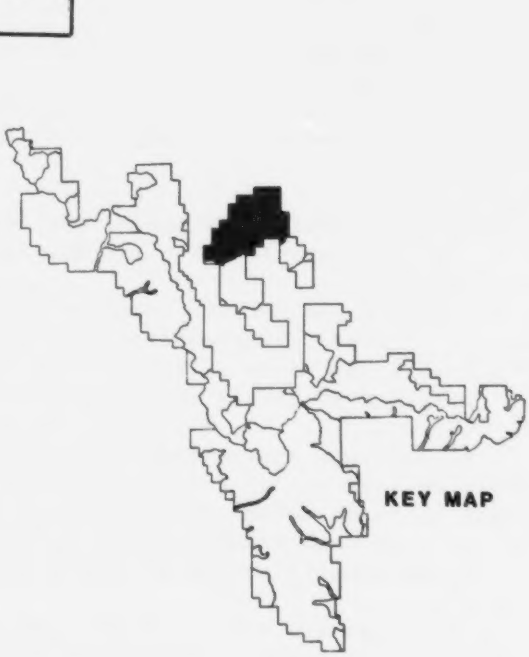

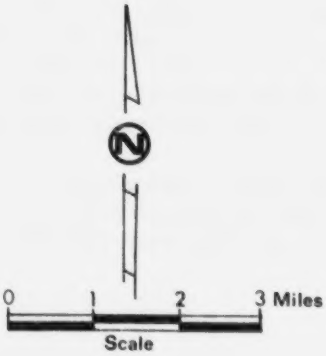
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LIMA PLANNING UNIT

Roadless Area Name: 1-016 McKenzie Canyon	Gross Acres	Net Acres
	33,842	33,652

I. DESCRIPTION

The McKenzie Canyon Roadless Area includes the northern end of the Tendoy Mountain Range. It is part of the Lima Planning Unit in the Dillon Ranger District. Access is from dirt roads off Interstate 15 and from the County road in Medicine Lodge Creek. The remainder of the transportation system consists of primitive four-wheel-drive roads.

Geographically, this unit extends from the Forest boundary in the vicinity of Deer and Bell Canyons south to Wilson and McKnight Creeks.

The northeast side is dissected by steep, rocky canyons that grade into moderately steep, dissected foothills. A broad, gently sloping ridge forms the north edge of the area. The west side is composed of similar topography. Generally, the area is mountainous with wide expanses of adjacent rolling foothills. Elevations range from 6,400 ft. in McKenzie Canyon to 8,600 ft. along the ridge tops. Precipitation in the area is low.

Soils in the northeast are shallow silt loams derived from limestone. Very shallow, rocky soils occur on the mountain ridge south of McKnight Canyon. Moderately deep, gravelly loams and clay loams occur on the gentle alluvial fans along the east side. In the west, most soils are shallow silt loams derived from limestone.

Cover is primarily grass except for Douglas-fir and lodgepole pine at higher elevations and on northern exposures. The north and northeast-facing slopes of the Tendoys are forested with Douglas-fir the dominant species.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Although low standard, four-wheel-drive roads penetrate into the area and existing range developments impact the natural appearance of the area, impacts are relatively localized. However, they can be viewed for some distance because of the gentleness of the terrain in the foothills. The surrounding area is sparsely populated, rural community or adjacent Forest lands. One primitive, ridgetop road, approximately six miles long, traverses completely through the area, running from the vicinity of Poison Lakes through the Sourdough drainage. Another primitive road intrudes approximately one and a half miles along the Kate Creek drainage on the western boundary of the unit. Approximately ten miles of trails also provide access to points within the interior of the roadless area.

B. OPPORTUNITIES FOR SOLITUDE

The area extends at most 9 miles east to west, and 7 miles north to south. At least eight creeks drain the area. The canyons and size of the area provide for moderate opportunities for solitude and other wilderness values.

C. PRIMITIVE RECREATION OPPORTUNITIES

Although the primary recreation use of the area is hunting, opportunities for hiking, camping, and rock climbing also occur. The mountainous and rolling-hill nature of the area provides for some topographic screening. Douglas-fir and lodgepole pine stands provide vegetative screening at higher elevations.

D. OTHER FEATURES

Sourdough Cave contains native American pictographs.

E. MANAGEABILITY AND BOUNDARIES

The McKenzie Canyon Roadless Area could be managed as wilderness and could be combined with adjacent roadless areas into a larger area. The combined areas would be completely surrounded by private and BLM land, and would require extensive posting.

1977 Inventory Acres:	34,500 gross	34,310 net
1983 Inventory Acres:	33,842	33,652
Change	- 658	- 658

Inventoried acres changed as a result of acreage calculation for the current planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

McKENZIE CANYON ROADLESS AREA
Area Descriptor: 1-016

CATEGORY	UNIT	VALUE
Gross Acres	acres	33,842
Net Acres	acres	33,652
Recreation		
Primitive	RVD'S	425
SPNM	RVD'S	619
SPM	RVD'S	612
Range		
Existing obligated suitable	Acres	23,346
Allotments	# of	8
AUM'S	AUM'S	2126
Existing vacant suitable	Acres	4075
Allotments	# of	3
Timber		
Tentative suitable	Acres	8150
Standing Volume	MBF	44,644
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	15,072
Elk		
Winter Habitat	Acres	1851
Deer		
Winter Habitat	Acres	12,979
Significant Fisheries		
Stream miles	Miles	3.7
Stream Habitat	Acres	2.5
Lakes	# of	0
Lakes-Habitat	Acres	0
Water Developments		
Existing	# of	0
Minerals Favorabiliy		
Very High	Acres	0
High	Acres	10,096
Moderate	Acres	23,556
Low	Acres	0
Claims	# of	7
Oil and Gas Favorability		
Very High	Acres	23,556
High	Acres	10,096
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	33,652

1. Recreation
Present recreation use is mainly hunting. Potentials also exist for hiking.

2. Wildlife
The unit provides habitat for many wildlife species. Of primary importance to the public are big game species, such as elk, mule deer, pronghorn, mountain lion, and black bear. Sporadic gray wolf (an endangered species) activity was recorded for the area in the 1970's. Upland game birds, such as sage, spruce, and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk.

3. Water
The unit's capacity to produce water is low, and water turbidity is moderate. There are only minor streams which flow yearlong.

4. Livestock Operations
Cattle graze a small portion of the area in May through June of each year. The remainder of the area is vacant. Cattle use is dependent on available stockwater and use on adjacent private land.

5. Ecology
Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. Lower elevations are primarily representative of grass and grass/sagebrush steppes.

6. Timber
Timber is scattered and occurs primarily at higher elevations and on northern exposures. Previous harvesting has been limited to incidental harvest of poles, posts, and a few bridge timbers for general ranch use.

7. Minerals/Oil and Gas
Geologic favorability for locatable minerals is moderate (70%) to high (30%). Mining activity is limited. Geologic favorability for oil and gas is very high (70%) to high (30%). Hydrocarbon saturated rocks have been identified at the eastern boundary of the area. The entire area is leased for oil and gas. Extensive geophysical exploration has occurred and will continue to occur. An oil and gas drillsite was approved in this area in 1981.

8. Cultural Resources
Sourdough Cave contains native American pictographs.

9. Land Use Authorizations
There are no land use authorizations in this unit.

10. Non-Federal Lands
The only private lands in the area are patented mining claims in the vicinity of Kate Creek, totaling 190 acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire, insects, and disease have created only minor impacts to this roadless area.

2. Insect and Disease

See above.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers

The McKenzie Canyon Roadless Area is located a considerable distance from the nearest wilderness areas; the Lee Metcalf and Anaconda-Pintler Wildernesses are approximately 70-75 miles away. The nearest cities with populations exceeding 30,000 are Butte, Bozeman, and Idaho Falls.

2. Contribution to Wilderness Preservation System

This area would contribute ecological diversity to the National Wilderness Preservation System representing low and mid-elevation grass steppes with moderate topographical relief.

3. Public Interest

The McKenzie Canyon Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land management planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-016. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was not large enough, had no special wilderness qualities, and was roaded.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement there was little specific support expressed for wilderness designation of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the McKenzie Canyon Roadless Area (1-016)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	33,652	0	0	0	0	33,652	0	0
Group 2: (Timber)	2356	1010	0	0	4711	3702	0	0	2692	0
Group 3: High Range, High Range with Low-Intensity Wildlife, No Timber)	0	6730	0	0	673	8076	3365	0	10,096	5015
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	31,296	22,547	0	27,258	23,557	13,461	15,143	0	12,115	15,688
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife, No Timber)	0	3365	0	6394	4711	8413	15,144	0	8749	12,949
TOTAL:	33,652	33,652	33,652	33,652	33,652	33,652	33,652	33,652	33,652	33,652

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	2586	2080	0	0	8321	4392	0	0	4082	0
Roadless:										
Decade 1	33,652	33,652	0	33,652	33,652	33,652	33,652	0	33,652	33,652
Decade 5 *	31,066	31,572	0	33,652	25,331	29,260	33,652	0	29,570	33,652
Wilderness:	0	0	33,652	0	0	0	0	33,652	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The McKenzie Canyon Roadless Area 1-016 is designated wilderness in Alternatives C and I.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing primitive roads and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Thus, the ridgetop road from Poison Lakes through the Sourdough drainage would be returned to "trail" conditions. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile, 4x4, and trailcycle use, the primitive roads and trails would be naturally narrow in time. Hunting and day hiking could be significant recreation uses under a wilderness designation.

The 8150 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 44.6 MMBF in standing volume. This timber volume is scattered and sparse. Access would be costly, with a lot of road mileage necessary to reach the scattered pockets. The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base.

Current livestock grazing, 2126 AUM's, could continue on the portions of the eight allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas on the north and northeast faces of the Tendoy Mountains as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Elk and deer winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Wilderness designation would increase the land base in the Wilderness Preservation System. Addition of open country such as this area could provide ecological diversity in the System.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of minerals, range, wildlife, and recreation. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Outfitter and guide operations in the area could benefit from the attraction of wilderness. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Geologic favorability for oil and gas is very high for 70 percent of the area.

Exercise of valid existing rights on 7 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 33,652 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area. It is very likely that existing rights will be exercised by oil and gas lessees or assignees in this area. Interest in drilling in this area continues. A drillsite was approved in this area in 1981, but it was not drilled.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the McKenzie Canyon Roadless Area (1-016) are assigned these prescriptions in Alternatives A, B, F, G, and W; from 3 to 14 percent in Alternatives B and F, respectively. (See Table V.,A., preceding this discussion.)

Timber harvest is scattered throughout the roadless area. Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources. Timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Roads constructed to access the areas where timber management will occur, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. However, roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources could benefit by the creation of transitory range which may become available for grazing. However, in this area there are already existing vacant allotments, therefore, the transitory forage produced may be in excess of that that could be utilized. Timber harvest may remove natural barriers, requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions. An area currently impacted only by jeep trails and range improvements would become crosshatched with logging roads and cutting units.

Elk security will be reduced in the short-term if existing stands are removed from cover capability. Due to the sparse scattered nature of the timber volume, it would be difficult to maintain adequate hiding cover in this area.

Timber and mineral resources would be available, thus providing some support to the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. Geologic favorability for oil and gas is very high for 70% of the area.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

Between 2 percent and 30 percent of the McKenzie Canyon Roadless Area (1-016) is assigned to these prescriptions in Alternatives B, F, G, H, W and S.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreation opportunities would change some, primarily in the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Large portions of the McKenzie Canyon Roadless Area (1-016) are assigned to these prescriptions in all Alternatives but C and I; from 36 percent in Alternative W to 93 percent in Alternative A. (See Table V.A.). Generally these are the steeper slopes and draws in this roadless area.

As long as areas managed under the primitive and semi-primitive recreation and custodial emphases remains roadless, they will retain existing wilderness/roadless capabilities. However, this prescription allows roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Since this management emphasis maintains the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available. For example, the public would still have motorized access to the area via the four-wheel-drive roads and trails. Hunting would generally remain the primary use but opportunities for hiking, camping and rock climbing would be protected. The amenities of the area would continue to support outfitter and guide operations, and other service-oriented businesses. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

Up to 45 percent of the McKenzie Canyon Roadless Area 1-016 is assigned to these prescriptions in the alternatives, with the exception of Alternatives A, C and I.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Management activities under these prescriptions should have few, if any, adverse impacts on the existing semi-primitive recreation opportunities. Should additional roads be permitted for mineral development or to provide access to other management areas, semi-primitive recreation activities will be adversely affected.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accomodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Geologic favorability for oil and gas is very high for 70 percent of the area.

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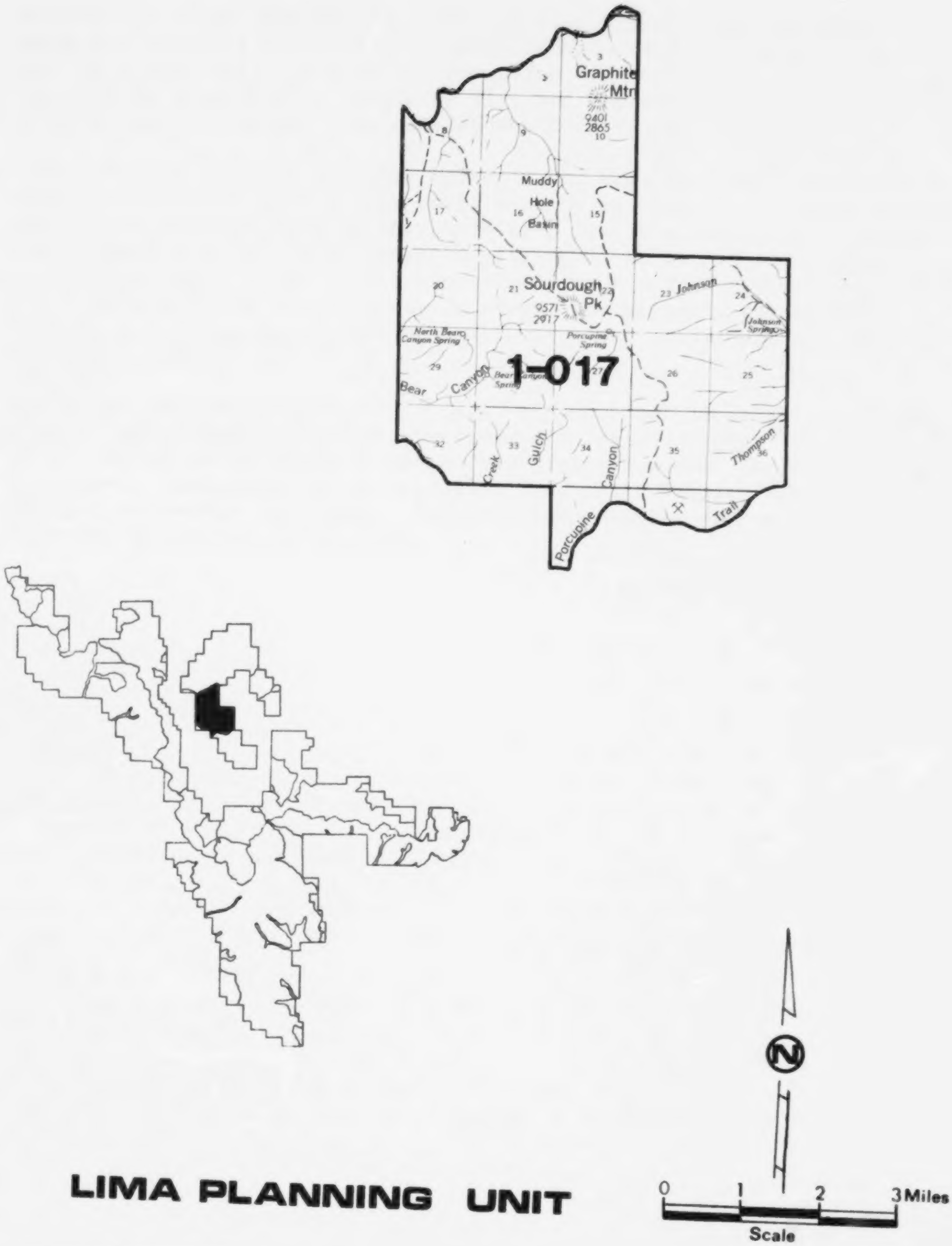
ROADLESS AREA 1-017

SOURDOUGH PEAK


3
Graphite Mtn
9401
2865
10
8
9
Muddy Hole Basin
17
16
15
20
21
Sourdough Pk
9571
2917
22
23
Johnson
24
Johnson Spring
North Bear Canyon Spring
Porcupine Spring
1-017
29
Bear Canyon
Bear Canyon Spring
27
26
25
32
33
34
35
36
Creek
Gulch
Canyon
Thompson
Porcupine
Trail
N
0
1
2
3 Miles
Scale

LIMA PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: Sourdough Mountain 1-017	Gross Acres	Net Acres
	14,843	14,838

I. DESCRIPTION

The Sourdough Mountain Roadless Area is located approximately 18 miles northwest of Lima, Montana on the western slopes of the Tendoy Mountain Range. It is in the Lima Planning Unit of the Beaverhead National Forest in the Dillon Ranger District. Access is possible via low standard dirt roads from the County road up Medicine Lodge Creek and Big Muddy Creek.

It extends from Wilson Creek to Porcupine Creek. The southern extremity of this unit is bounded by developed Forest lands. The area is mountainous with wide expanses of adjacent rolling foothills. The west side of the area contains a broad, dry, gently sloping ridge. The ridge breaks off into steep, deep, rocky canyons in the southwest portion. Elevations range from 6,500 to 9,600 feet at the summit of Sourdough Peak, the major mountain in the area.

Lower slopes and foothills are grassland and sagebrush/grassland. The north and northeast-facing slopes of the Tendoys are forested with Douglas-fir, the dominant species. Some lodgepole pine and whitebark pine occur at higher elevations. Most soils are shallow silt loams derived from limestone.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The character of this area has remained unspoiled with grassy slopes and scattered timber stands, however roads that surround the unit detract from the natural integrity.

B. OPPORTUNITIES FOR SOLITUDE

Limited size and lack of diversity are major impacts on opportunities for solitude and primitive recreation and on wilderness capability of the area.

C. PRIMITIVE RECREATION OPPORTUNITIES

Little topographic and vegetative screening plus little diversity of opportunity contribute to limited opportunities for primitive recreation. The opportunity for challenging experiences in the area is rare.

D. MANAGEABILITY AND BOUNDARIES

The area is surrounded by private or BLM ground and would require extensive posting. There are roads on three sides of this unit.

1977 Inventory Acres:	14,800 gross	14,795 net
1983 Inventory Acres:	14,843	14,838
Change	+ 43	+ 43

The inventoried acres have changed as a result of acreage recalculation for the current Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

SOURDOUGH PEAK ROADLESS AREA
Area Descriptor: 1-017

CATEGORY	UNIT	VALUE
Gross Acres	acres	14,843
Net Acres	acres	14,838
Recreation		
Primitive	RVD'S	187
SPNM	RVD'S	273
SPM	RVD'S	270
Range		
Existing obligated suitable	Acres	10,305
Allotments	# of	6
AUM'S	AUM'S	1625
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	1964
Standing Volume	MBF	11,028
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	2545
Elk		
Winter Habitat	Acres	2148

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	397
Significant Fisheries		
Stream miles	Miles	0
Stream Habitat	Acres	0
Lakes	# of	2
Lakes-Habitat	Acres	4
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	2968
Moderate	Acres	11,870
Low	Acres	0
Claims	# of	34
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	14,838
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased Area	Acres	14,838

1. Recreation

Current recreation use is mainly hunting.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, pronghorn, mountain lion, and black bear. Sporadic gray wolf (an endangered species) was recorded for the area in the 1970's. Upland game birds, such as sage, spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk.

3. Water

The unit is relatively dry but has some minor intermittent streams that flow into two 2-acre lakes.

4. Livestock Operations

This area is comprised of portions of six grazing allotments (five cattle and one sheep). Livestock graze nearly all the suitable range present. A portion of the area is vacant. Range improvement development is considerable, although all the allotments are not presently under intensive grazing systems.

5. Ecology

This area is primarily representative of grassland and grass/sagebrush steppes.

6. Timber

Timber is scattered, occurring as pockets on foothills and as sparse stands on north and northeast facing slopes of the Tendoy Mountain Range.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate (80%) to high (20%). Mining activity is limited. Geologic favorability for oil and gas is high. The entire area is leased for oil and gas. Extensive geophysical exploration has occurred, and will continue to occur.

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown; however, known Indian use of the general area suggests that undiscovered sites may exist.

9. Land Use Authorizations

There are no land authorizations in this area.

10. Non-Federal Lands

There are five acres of private land in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

The fire frequency in the Tendoy Mountain Range in this area is significant. All fires reported were started by lightning. The local permittees, along with the Lima Fire Department, are usually the first responders on a fire in this area. Permittees normally will not allow the grass on grazing allotments to burn during the summer months. The heaviest public use in this area is from permittees, hunters, and oil companies doing seismograph work.

2. Insect and Disease

Insect infestation and disease is minimal, because the timber stands are sparse.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers

The nearest wilderness areas are the Anaconda-Pintler and the Lee Metcalf Wildernesses which are not used extensively at this time. The area is also a long distance from major population centers with the closest centers over 30,000 being Butte, Bozeman, and Idaho Falls.

2. Contribution to Wilderness Preservation System

This area would contribute to the National Wilderness Preservation System by providing examples of low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3 Public Interest

The Sourdough Mountain Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land managment planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-017. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was not large enough, had no special wilderness qualities, and was roaded.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was little specific support expressed for wilderness designation of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Sourdough Mountain Roadless Area (1-017)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	14,838	0	0	0	0	14,838	0	0
Group 2: (Timber)	40	148	0	0	1110	0	0	0	148	0
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	7123	0	0	0	4897	8458	0	4451	8783
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	14,798	1632	0	11,128	10,315	3116	4155	0	6530	4861
Group 5: (High Range, High Wildlife, Mod/Low Range, Wildlife No Timber)	0	5935	0	3710	3413	6825	2225	0	3709	1194
TOTAL: -	14,838	14,838	14,838	14,838	14,838	14,838	14,838	14,838	14,838	14,838

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* Land designations are the same for H, Ha and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	40	148	0	0	2510	0	0	0	148	0
Roadless:										
Decade 1	14,838	14,838	0	14,838	14,838	14,838	14,838	0	14,838	14,838
Decade 5 *	14,798	14,690	0	14,838	12,328	14,838	14,838	0	14,690	14,838
Wilderness:	0	0	14,838	0	0	0	0	14,838	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Sourdough Peak Roadless Area 1-017 is designated wilderness in Alternatives C and I.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Motorized use occurs without restriction on the established trails in the area (primarily along a north/south ridge) and off trail, along grassy, open ridges. Motorized access is generally for hunting; without trailcycle use, trails would naturally narrow in time and ridges would lose their wheel tracks.

The 1964 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 11 MMBF in standing volume. This volume is scattered throughout the roadless area in pockets that would require costly access. Assignment of a wilderness prescription does not result in any major loss of timber volume or value.

The small loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Livestock grazing is a major use of this area, with the majority of the acres within established allotments. About 1625 AUM's could continue on the portions of the 6 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly. Wilderness designation would preclude development of intensive grazing programs, including vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Wilderness designation would increase the land base in the Wilderness Preservation System, and provide ecological diversity in the System.

Social and economic effects center around the resource values of range, wildlife, and recreation. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. However, in this area, impacts to these industries would be minor. Outfitter and guide operations could benefit from the attraction of wilderness. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting, currently the major use of the area, and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 34 mining claims will be restricted, but may have a substantial impact on the area's wilderness character.

Exercise of rights granted to oil and gas lessees on 14,838 acres could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Very little of the Sourdough Mountain Roadless Area (1-017) is assigned these prescriptions in Alternatives A, B, F and W; from less than 1 percent in Alternatives A, F and W to approximately 7 percent in Alternative F.

Timber management (visual quality objectives modification/maximum modification) will impact very limited acreage within this roadless area. However, on those specific acres, timber management will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Several miles of roads will have to be built to access the scattered, sparse stands of timber. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. Range activities, however, would not significantly affect the wilderness potential.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions. Hunting quality will be changed as the area is roaded and the pockets of timber harvested.

Elk security will be reduced as existing stands are removed from cover capability and motorized access opportunities are increased. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists assuming some restrictions on motorized access are imposed.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In these prescriptions timber and mineral resources would be available, thus supporting the wood products and minerals industries. However, the amount of activity predicted is minor, so beneficial impacts on these industries will be minor. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, those publics seeking that sort of experience would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

Up to one-half of the Sourdough Mountain Roadless Area (1-017) is assigned these prescriptions in Alternatives B, G and W. Alternatives H and S (the Proposed Action), assigns 57 to 59 percent of the Roadless Area to these prescriptions.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions. Generally the primary use of the area, hunting, will continue unimpacted.

Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and semi-primitive
   Recreation/Custodial

From 11 to 99 percent of the Sourdough Mountain Roadless Area (1-017) is assigned to these prescriptions in all alternatives except C and I. 11 percent of the Roadless Area is assigned in Alternative B; 99 percent is assigned in Alternative A.

As long as areas managed under the primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, this emphasis allows roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone. Visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline, although existing motorized use has already somewhat impacted these values.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Since the custodial prescription maintains the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations. Hunting would probably continue to be the predominant recreational use of the area. Mineral exploration could occur. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
   Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

Between 8 percent and 45 percent of the Sourdough Mountain Roadless Area (1-017) is assigned these prescriptions in Alternatives B, D, F, G, H, W and S.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected. Hunting opportunities and types of experiences would be maintained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

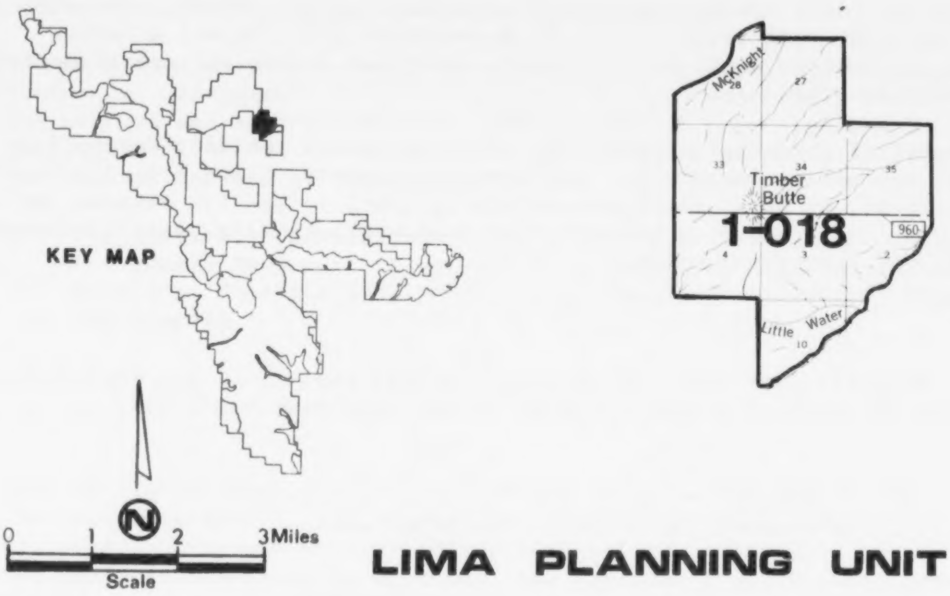
Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

ROADLESS AREA 1-018

TIMBER BUTTE



LIMA PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-018 Timber Butte	Gross Acres	Net Acres
	5,018	5,018

I. DESCRIPTION

The Timber Butte Roadless Area is located in the Lima Planning Unit in the Dillon Ranger District. This area may be reached from low standard dirt roads off Interstate 15. It extends from the McKnight Canyon to Little Water Canyon, between the McKenzie Canyon Roadless Area and the Dixon Mountain Roadless Area. The appearance of this region is mountainous with rolling foothills. Lower elevations start at 6,300 ft. rising to 9,470 ft. at the summit of Timber Butte. Capacity of this area to produce water is low; average annual precipitation does not exceed twelve to twenty inches.

Very shallow, rocky soils occur on the mountain ridge south of McKnight Canyon. Moderately deep, gravelly loams and clay loams occur on the gentle alluvial fans along the east side and on the lower elevation footslopes.

Lower slopes and foothills are grassland and sagebrush/grassland. The north and northeast-facing slopes of the Tendoys are forested with Douglas-fir, the dominant species. Some lodgepole pine and whitebark pine occurs at higher elevations.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The character within this area has remained unspoiled with gentle alluvial fans and grass and sage-covered hills, but the narrowness of the area and the fact that it is surrounded by roads detract from its natural integrity.

B. OPPORTUNITIES FOR SOLITUDE

The area extends less than 3 miles east to west and 4 miles north to south. The area is generally Timber Butte, part of the Tendoy Mountains, with no major drainages. Therefore, the small size and general topography offer few opportunities for solitude and other wilderness experiences.

C. PRIMITIVE RECREATION OPPORTUNITIES

Lack of topographic and vegetative screening and little diversity of opportunity provide for only limited primitive recreation opportunities in this roadless area. Challenging experiences are few.

D. OTHER FEATURES

There are no notable topographical, geographical or cultural features in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

This area could not be combined with other roadless areas because of the roads that intersect the areas at McKnight and Little Water Canyons. Boundary changes to exclude incompatible uses would result in lessening the acres in this roadless area to a point where the area would no longer meet the size criteria for wilderness designation.

1977 Inventory Acres:	5400	5400
1983 Inventory Acres:	5018	5018
Change	- 382	- 382

Inventoried acres have changed as a result of acreage recalculation for the current Forest planning process.

III. AVAILABILILTY

A. RESOURCE POTENTIALS

TIMBER BUTTE ROADLESS AREA
Area Descriptor: 1-018

CATEGORY	UNIT	VALUE
Gross Acres	acres	5018
Net Acres	acres	5018
Recreation		
Primitive	RVD'S	63
SPNM	RVD'S	92
SPM	RVD'S	91
Range		
Existing obligated suitable	Acres	2238
Allotments	# of	3
AUM'S	AUM'S	90
Existing vacant suitable	Acres	1080
Allotments	# of	1
Timber		
Tentative suitable	Acres	905
Standing Volume	MBF	5513
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	4291
Elk		
Winter Habitat	Acres	591

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	3375
Significant Fisheries		
Stream miles	Miles	0
Stream Habitat	Acres	0
Lakes	# of	0
Lakes-Habitat	Acres	0
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	5018
Low	Acres	0
Claims	# of	0
Oil and Gas Favorability		
Very High	Acres	5018
High	Acres	0
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	5018

1. Recreation
Recreation use is mainly hunting. There are no developed sites and roads are low standard, four-wheel-drive roads.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, pronghorn, mountain lion, and black bear. Sporadic gray wolf activity (an endangered species) was recorded for the area in the 1970's. Upland game birds, such as sage, spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk.

3. Water

The unit is relatively dry with the exception of some minor intermittent streams.

4. Livestock Operations

A portion of the area is grazed by cattle in May through August of each year. Use of the area by domestic livestock is limited by available stockwater and use on adjacent private land. Three grazing allotments are involved.

5. Ecology

The area is representative of grassland and grass/sagebrush steppes.

6. Timber

The timber in the area is scattered and has been eliminated from the timber base through past planning decisions.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate. Mining activity is limited. Geologic favorability for oil and gas is very high. Hydrocarbon saturated rocks have been identified at the northwestern boundary of the area. The entire area is leased for oil and gas. Extensive geophysical exploration has occurred, and will continue to occur.

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown; however, past Indian use of the general area suggests that sites may exist in the roadless area.

9. Land Use Authorizations

No special uses are authorized in this area.

10. Non-Federal Lands

There are no private acres in this area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

The fire frequency in the Tendoy Mountain Range in this area is significant. All fires reported were started by lightning. The local permittees, along with the Lima Fire Department, are usually the first responders on a fire in this area. Permittees normally will not allow the grass on grazing allotments to burn during the summer months. The heaviest public use in this area is from permittees, hunters, and oil companies doing seismograph work.

2. Insect and Disease

Insect infestation and disease are considered minimal due to sparse timber stands in the Tendoy Range.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

This area is located 95-100 miles from the Anaconda-Pintler and the Lee Metcalf Wildernesses which receive moderate use. It is also a long distance from major population centers with the closest over 30,000 in population being Butte, Bozeman, and Idaho Falls.

2. Contribution to Wilderness Preservation System

This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest

The Timber Butte Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land managment planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-018. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was not large enough, had no special wilderness qualities, and was roaded.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was little support expressed for wilderness designation of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Timber Butte Roadless Area (1-018)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	5018	0	0	0	0	5018	0	0
Group 2: (Timber)	0	803	0	0	452	602	0	0	690	0
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	953	0	0	0	50	0	0	953	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	5018	2610	0	2962	3964	3362	3262	0	2672	3487
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	652	0	2056	602	1004	1756	0	703	1531
TOTAL:	5018	5018	5018	5018	5018	5018	5018	5018	5018	5018

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	0	5018	0	0	5018	5018	0	0	5018	0
Roadless:										
Decade 1	5018	5018	0	5018	5018	5018	5018	0	5018	5018
Decade 5 *	5018	0	0	5018	0	0	5018	0	0	5018
Wilderness:	0	0	5018	0	0	0	0	5018	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Timber Butte Roadless Area (1-018) is designated wilderness in Alternatives C and I.

Wilderness designations could enhance the area's wilderness attributes since these are existing uses not usually associated with wilderness designation. The existing jeep tracks and motorized use of the area could be eliminated. No system trails exist. With only light foot traffic, jeep tracks would eventually disappear.

The 905 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 5.5 MMBF in standing volume. This timber is very sparse and scattered; therefore, wilderness classification does not result in any significant loss of timber volume.

Current livestock grazing, 90 AUM's, could continue on the portions of the 3 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Wildlife habitats would not change much in the short-term period. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands. Security for big game species would be maintained and perhaps enhanced as motorized access is curtailed.

Visual quality of the area would be retained and, over time, improved. Thus, that portion of the area visible from Interstate 15 would remain pristine. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.

Wilderness designation would only slightly increase the land base in the Wilderness Preservation System.

This area receives very light public use. Wilderness classification would most significantly impact the grazing permittees, hunters who are accustomed to motorized access to the area, and outfitters who have historically operated in the area on a day-use motorized basis. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would be altered to those that could occur without vehicular access. The area is small, therefore, hunting access would not be significantly altered with the motorized restriction.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. The entire area has very high geologic favorability for oil and gas.

Current information indicates no mining claims exist within this area. No impact on wilderness character from the exercise of valid existing rights is anticipated.

As of December, 1983, there were approximately 5,018 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area. It is very likely that existing rights will be exercised by oil and gas lessees or assignees in this area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification
   and Retention/Partial Retention)

Less than 20 percent of the Timber Butte Roadless Area (1-018) is assigned these prescriptions in Alternatives B, F, G, and W.

Timber management would occur primarily on the north-facing slopes of Timber Butte. The sparse, scattered nature of the timber resource limits the intensity of management. Still, where timber harvest occurs, activities will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, this additional forage would probably not be utilized due to water shortages.

The opportunities for primitive and semi-primitive recreation will be severely reduced or eliminated under these prescriptions in the areas where timber harvest occurs. Thus, the northern half of the roadless area will be most impacted.

Under these prescriptions timber and mineral resources would be available. The amount of timber available would not really benefit the timber industry, however; road development for timber harvest could facilitate oil and gas development. The change in recreation setting could be disruptive to those publics using the area for semi-primitive recreation; however, these few publics who use the area for hunting would, most likely, shift their activities to less developed parts of the Forest if they still wanted a serious primitive recreation experience. Grazing operations could be expanded where transitory range is created. However, as noted above, available water is a limiting factor.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. The area has very high geologic favorability for oil and gas.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

At most 20 percent of the Timber Butte Roadless Area (1-018) is assigned these prescriptions in Alternatives B, G and W. Due to the small amount of acreage that would be affected by this assignment, and the limitation on intensive range management imposed by the dryness of the country, the impacts here are discussed in Category 5.

4. Designation: Nonwilderness
   Management Emphases: Primitive and semi-primitive Recreation/Custodial

100 percent of the Timber Butte Roadless Area (1-018) is assigned to these prescriptions in Alternative A. Between 52 and 79 percent of the Area (1-018) is assigned to these prescriptions in Alternatives B, D, F, G, H, W and S.

As long as areas managed under the primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, this category allows roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. These are primarily associated with fall hunting activities. However, a variety of other recreation experiences would be available including trailbike riding, hiking, snowmobiling and so on. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment to the custodial prescription would not restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

5. Designation: Nonwilderness
Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

Between 12 and 45 percent of the Timber Butte Roadless Area (1-018) is assigned to these prescriptions in the alternatives considered, with the exception of Alternatives A, C and I.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term.

The dryness of the area limits the intensity of range management that can occur, still, structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could increase. The number of unimproved wheeltracks also could be expected to increase.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

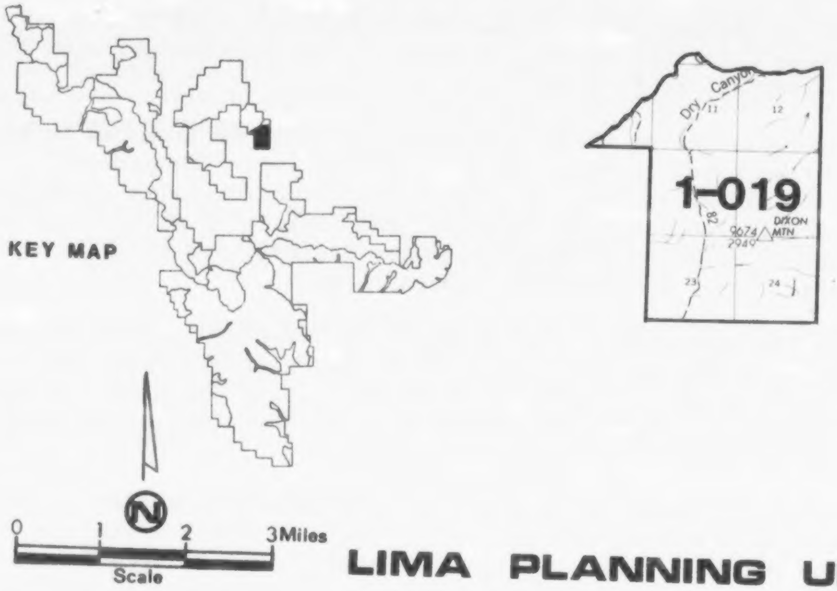
Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses, primarily big game hunting, would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

ROADLESS AREA 1-019

DIXON MOUNTAIN



LIMA PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-019 Dixon Mountain	Gross Acres	Net Acres
	3,982	3,982

I. DESCRIPTION

The Dixon Mountain Roadless Area is located approximately 12 miles northwest of Lima, Montana on the eastern slopes of the Tendoy Mountains. It is in the Lima Planning Unit of the Beaverhead Forest in the Dillon Ranger District.

Its geographic location extends from Little Water Canyon south to the Forest boundary above Big Sheep Creek.

The southeast side of this unit has a steep, rocky east face that drops abruptly to the broad alluvial fan of the Red Rock Valley. The area appears generally as mountainous with steep, dry slopes. Elevations range from 6,300 feet to 9,600 feet on Dixon Mountain.

Cover is primarily grass and rock except for Douglas-fir and lodgepole pine at higher elevations and on northern exposures.

The capacity of this area to produce water is low. The one stream in Little Water Canyon becomes intermittent or ephemeral. Average annual precipitation does not exceed 20 inches.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The narrowness of the area permits viewing into the interior from Interstate 15 which lies just a few miles to the east of the unit. However, internally, the unit is natural appearing.

B. OPPORTUNITIES FOR SOLITUDE

The area's limited size and lack of diversity have a major influence on the opportunities for solitude and primitive recreation and reduce the capability of the area for wilderness.

C. PRIMITIVE RECREATION OPPORTUNITIES

Little topographic and vegetative screening and little diversity of opportunity provide very limited opportunities for primitive recreation.

D. OTHER FEATURES

There are no significant features or landmarks in this unit.

E. MANAGEABILITY AND BOUNDARIES

The area is very small and cannot be easily combined with other roadless areas because of the road that intersects at Little Water Canyon. Boundary adjustments to remove incompatible uses would only result in further reducing the acreage in the roadless area below that which can reasonably be managed for quality wilderness experiences. The surrounding area is sparsely populated, rural community or BLM lands.

1977 Inventory Acres:	3700 gross	3700 net
1983 Inventory Acres:	3982	3982
Change	+ 282	+ 282

The inventoried acres have changed as a result of acreage recalculations for the current Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

DIXON MOUNTAIN ROADLESS AREA
Area Descriptor: 1-019

CATEGORY	UNIT	VALUE
Gross Acres	Acres	3982
Net Acres	Acres	3982
Recreation		
Primitive	RVD'S	50
SPNM	RVD'S	73
SPM	RVD'S	73
Range		
Existing obligated suitable	Acres	1455
Allotments	# of	2
AUM'S	AUM'S	72
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	889
Standing Volume	MBF	3746
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	3808
Elk		
Winter Habitat	Acres	153

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	3655
Significant Fisheries		
Stream miles	Miles	0
Stream Habitat	Acres	0
Lakes	# of	0
Lakes-Habitat	Acres	0
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	3982
Low	Acres	0
Claims	# of	0
Oil and Gas Favorability		
Very High	Acres	3,982
High	Acres	0
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	3982

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1. Recreation

The unit provides recreation opportunities primarily for hunting.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, pronghorn, mountain lion, and black bear. Sporadic gray wolf activity (an endangered species) was recorded in the 1970's. Upland game birds, such as sage, spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk. The unit is an approved reintroduction area for bighorn sheep which is currently a priority with the State.

3. Water
The unit has a very low capacity to store, receive and produce water.

4. Livestock Operations
There is little domestic grazing in this area. It is not ideally suited for grazing allocations.

5. Ecology
This area is primarily representative of grassland and grass/sagebrush steppes.

6. Timber
Timber in the roadless area is scattered.

7. Minerals/Oil and Gas
Geologic favorability for locatable minerals is moderate. Mining activity is limited. Geologic favorability for oil and gas is very high. Hydrocarbon saturated rocks have been identified near the area. The entire area is leased for oil and gas. Extensive geophysical exploration has occurred, and will continue to occur.

8. Cultural Resources
The potential for prehistoric and historic cultural resources is unknown; however, known Indian use of the general area suggests that undiscovered sites may exist.

9. Land Use Authorizations
There are no special uses authorized for this area.

10. Non-Federal Lands
No private acres are included in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
The fire frequency in the Tendoy Mountain Range in this area is significant. All fires reported were started by lightning. The local permittees, along with the Lima Fire Department, are usually the first responders on a fire in this area. Permittees normally will not allow the grass on grazing allotments to burn during the summer months. The heaviest public use in this area is from permittees, hunters, and oil companies doing seismograph work.

2. Insect and Disease
Insect infestation and disease are considered minimal in this area because timber is scattered.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The closest wilderness areas are the moderately-used Anaconda-Pintler Wilderness and the Lee Metcalf Wilderness, both located quite some distance from the Dixon Mountain Roadless Area. The area is also a long distance from major population centers over 30,000; the closest being Butte, Bozeman, and Idaho Falls.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass/sagebrush steppes with moderate topographical relief.

3. Public Interest
The Dixon Mountain Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land managment planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-019. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was not large enough, had no special wilderness qualities, and was roaded.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was little support expressed for wilderness designation of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Dixon Mountain Roadless Area (1-019)

Management	Alternative (Net Acres)									
Emphases	A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	3982	0	0	0	0	3982	0	0
Group 2: (Timber)	200	796	0	0	580	757	0	0	637	0
Group 3: (High Range, High Range with Low Intensity Wildlife No Timber)	0	200	0	0	0	119	0	0	438	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	3782	2588	0	3942	3004	2628	3385	0	2469	3528
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	398	0	40	398	478	597	0	438	454
TOTAL: -	3982	3982	3982	3982	3982	3982	3982	3982	3982	3982

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management	Alternative (Net Acres)									
Emphasis	A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	3982	3982	0	0	3982	3982	0	0	3982	0
Roadless:										
Decade 1	3982	3982	0	3982	3982	3982	3982	0	3982	3982
Decade 5 *	0	0	0	3982	0	0	3982	0	0	3982
Wilderness:	0	0	3982	0	0	0	0	3982	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Dixon Mountain Roadless Area (1-019) is designated wilderness in Alternatives C and I.

Wilderness can enhance the area's wilderness attributes since these are some existing uses and facilities not usually associated with wilderness designation. Access to the area is very limited, with one trail through the area. Motorized access is limited due to washouts and terrain steepness. The minor existing motorized use would be curtailed with wilderness classification. Trails would naturally narrow in time.

The 889 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 4 MMBF in standing volume. This is a very minor impact on the timber resource. This minor loss in timber volume could easily be mitigated by increasing the intensity of timber management on areas remaining in the timber base.

Current livestock grazing, 72 AUM's, could continue on the portions of the 2 allotments involved.

Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained. Elk and deer winter ranges would continue to provide necessary forage, because these areas are permanent grasslands. Security would be provided for bighorn sheep if reintroduced to the area.

Visual quality as viewed from Interstate 15 would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only.

Wilderness designation would only slightly increase the land base in the Wilderness Preservation System.

Existing elk security cover would be maintained in that motorized access would be curtailed.

This area is very lightly used by the public. Wilderness classification would impact grazing permittees, and hunters who have historically had motorized access.

Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting would have to occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. The entire area has very high geologic favorability for oil and gas.

Current information indicates no mining claims exist within this area. No impact on wilderness character from the exercise of valid existing rights is anticipated.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Between 5 and 20 percent of the Dixon Mountain Roadless Area (1-019) is assigned these prescriptions in Alternatives A, B, F, G and W. This assignment to a timber prescription occurs primarily in the Ony Canyon area, the northwest portion of the Roadless Area.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn.

The roads associated with the timber harvest eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

The opportunities for semi-primitive recreation opportunities will be reduced or eliminated under these prescriptions in the north and west portions of this roadless area.

Security for wildlife, especially elk, deer, antelope and bighorn sheep, if reintroduced, would be adversely affected by the increased access to the area provided by logging roads.

The limited timber and energy mineral resources would be available. However, the amount of timber that would be harvested could not significantly contribute to the local timber industry. The change in recreation setting could be disruptive to those publics using the area for semi-primitive recreation; however, these few publics who hunt in the area would, most likely, shift their activities to less developed parts of the Forest if they wanted a semi-primitive hunting experience.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

Very little of the Dixon Mountain Roadless Area (1-019) is assigned to these prescriptions in Alternatives B, G, and W (see Table V.A.). Due to the limited acreage impacted by assignment of these prescriptions and the limitations imposed on intensive range management by water shortages, the impacts of this category are discussed in Category 5.

4. Designation: Nonwilderness
   Management Emphases: Primitive and semi-primitive Recreation/Custodial

The majority of the acres in the Dixon Mountain Roadless Area (1-019) are assigned these prescriptions in Alternatives A, B, D, F, G, H, W and S. (See Table V.A.).

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

In this category, range activities would continue at present levels and would not significantly affect wilderness potential.

Current public uses are primarily associated with fall hunting season. These uses would be maintained.

Assignment to the custodial prescription would not restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

5. Designation: Nonwilderness
   Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

At most, 15 percent of the Dixon Mountain Roadless Area (1-019) is assigned these prescriptions in Alternatives B, D, F, G, H, W and S.

The effects of implementing these prescriptions will be similar to those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation, such as sagebrush burning for forage improvement, could occur, the impacts of which could have limited impacts on the wilderness capabilities of the area. These impacts, would be relatively short-term.

The dryness of the area and its size limits the intensity of range management. Generally, range activities would continue at present levels and would not significantly affect wilderness potential.

Management activities under these prescriptions should have few, if any, adverse impacts on semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses, i.e., big game hunting, would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

III. AVAILABILITY

A. RESOURCE POTENTIALS

FOUR EYES CANYON ROADLESS AREA
Area Descriptor: 1-020

CATEGORY	UNIT	VALUE
Gross Acres	acres	8237
Net Acres	acres	8237
Recreation		
Primitive	RVD'S	87
SPNM	RVD'S	126
SPM	RVD'S	125
Range		
Existing obligated suitable	Acres	5849
Allotments	# of	2
AUM'S	AUM's	749
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	842
Standing Volume	MBF	4399
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	3611
Elk		
Winter Habitat	Acres	632

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	2979
Significant Fisheries		
Stream miles	Miles	0.8
Stream Habitat	Acres	1.0
Lakes	# of	0
Lakes-Habitat	Acres	0
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	8237
Low	Acres	0
Claims	# of	0
Oil and Gas Favorability		
Very High	Acres	8237
High	Acres	0
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	8237

1. Recreation

Recreation use in this roadless area is primarily hunting.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, pronghorn, mountain lion, and black bear. Upland game birds, such as sage, spruce, and blue grouse are also found in the units. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially raptor species such as the golden eagle and ferruginous hawk.

3. Water

The unit is relatively dry but has some minor streams that flow yearlong.

4. Livestock Operations

Most of the area is grazed by cattle on portions of two grazing allotments. Most of the range is primary with minor amounts of secondary range; primary range occurs at all elevations. Both allotments are under intensive management, and substantial range improvement developments are present.

5. Ecology

This area is predominantly representative of grassland and grass/sagebrush steppes with small patches of lodgepole pine occurring at the higher elevations.

6. Timber

Timber in the area is scattered and occurs primarily as small patches at higher elevations.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate. Mining activity is limited. Geologic favorability for oil and gas is very high. The entire area is leased for oil and gas. Extensive geophysical exploration has occurred and will continue to occur.

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown. However, past Indian use of the general area suggests that undiscovered sites may exist.

9. Land Use Authorizations

There are no land use authorizations.

10. Non-Federal Lands

There are no private lands within the boundaries of this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire, insects and disease have created only minor impacts on the area.

2. Insect and Disease

See above.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers. The closest wilderness areas are the Anaconda-Pintler and the Lee Metcalf Wilderness, both located considerable distances. The area is also quite far from major population centers over 30,000; Butte, Bozeman, and Idaho Falls are the closest.

2. Contribution to Wilderness Preservation System
This area is primarily representative of grassland and grass/sagebrush steppes with topographical relief. Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

3. Public Interest
The Four Eyes Canyon Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land management planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-020. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was "not large enough", "had no special wilderness qualities", and was "roaded".

In public response to the 1985 Revised Draft EIS and Proposed Plan Supplement, there was little support expressed for wilderness designation of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Four Eyes Canyon Roadless Area (1-020)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	8237	8237	8237	0	0	8237	0	0
Group 2: (Timber)	206	69	0	0	0	69	0	0	137	0
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	5986	0	0	0	3299	0	0	5611	0
Group 4: (Primitive.Semi-Primitive Recreation, Custodial)	8031	1702	0	0	0	1570	1976	0	1327	2704
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	480	0	0	0	3299	6261	0	1.62	5533
TOTAL:	8237	8237	8237	8237	8237	8237	8237	8237	8237	8237

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	296	69	0	0	0	69	0	0	137	0
Roadless:										
Decade 1	8237	8237	0	0	0	8237	8237	0	8237	8237
Decade 5 *	7941	8168	0	0	0	8168	8237	0	8100	8237
Wilderness:	0	0	8237	8237	8237	0	0	8237	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Four Eyes Canyon Roadless Area 1-020 is designated wilderness in Alternatives C, D, F and I.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Motorized use occurs without restriction in the area but there are no identified system trails with the exception of the trail in Four Eyes Canyon on the southwestern boundary. Without motorized access to the area, jeep tracks would be eliminated over time.

The 842 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 4.4 MMBF in standing volume. This volume is very sparse and scattered, located at the higher elevations, far from established road access. Development of the timber resource would be costly. Thus assignment of a wilderness prescription is not a significant impact in terms of timber volume or value lost.

The minor loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base.

Current livestock grazing, 749 AUM's, could continue on the portions of the two allotments involved. These allotments cover a large portion of the roadless area. However, management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. There are numerous structural improvements. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Big game key habitats, such as meadows and sagebrush foraging areas, would be maintained. Security would be maintained or enhanced as motorized access is curtailed. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Wilderness designation would increase the land base in the Wilderness Preservation System. This area could provide ecological diversity in the System.

Social and economic effects center around the range, wildlife and recreation resource values. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis.

However, in this roadless area, impacts to these industries would be generally minor. One exception, oil and gas, must be noted. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting, currently the most significant use of the area, and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. The entire area has very high geologic favorability for oil and gas.

Current information indicates no mining claims exist within this area. No impact on wilderness character from the exercise of valid existing rights is anticipated.

As of December, 1983, there were approximately 8,237 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area. It is very likely that existing rights will be exercised by oil and gas lessees or assignees in this area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Small portions of the Four Eyes Canyon Roadless Area (1-020) are assigned these prescriptions in Alternatives A, B, G and W.

Timber management (visual quality objectives modification/maximum modification), where it occurs, will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. However, timber management activities will impact, at most, 206 acres over the planning horizon, insignificant given the total roadless area.

The roads associated with any timber harvest, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. In addition, roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Due to the limited acreage that would be affected by timber harvest, there would be little impact to the semi-primitive recreation qualities available in the area as a whole.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High-Intensity Range, and High-Intensity Range and Low-Intensity Wildlife)

Up to 75 percent of the Four Eyes Canyon Roadless Area (1-020) is assigned these prescriptions in Alternatives B, G, and W.

Under these prescriptions, motorized use could increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will continue to impact the naturalness of the area. The number of such developments could be expected to increase. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions. The primary use of the area, fall hunting, will continue unimpacted.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because of the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and semi-primitive
Recreation/Custodial

As much as 97 percent of the Four Eyes Canyon Roadless Area (1-020) is assigned to these prescriptions in Alternative A. Other alternatives assign fewer acres; from 16 percent in Alternative W to 34 percent in Alternative S (the Proposed Action). Alternatives C, D, F and I assign no acreage to this prescription. (See Table V.A. preceding this discussion.).

As long as areas managed under the primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, this category allows roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue in this category at present levels. This would not significantly affect wilderness potential.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences, including fall hunting, would be available. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

5. Designation: Nonwilderness
Management Emphases: High-Intensity Range and High-Intensity Wildlife, Moderate and Low-Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Four Eyes Canyon Roadless Area (1-020) are assigned these prescriptions in Alternatives B, G, H, W and S; from 7 percent in Alternative B to 76 percent in Alternative H. (See Table V.,A. preceding this discussion.).

The effects of implementing these prescriptions will be similar to those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term.

Under the high-intensity range and high-intensity wildlife prescription, motorized use could increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of unimproved wheeltracks also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Management activities under these prescriptions should have few, if any, adverse impacts on semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. The entire area has very high geologic favorability for oil and gas.

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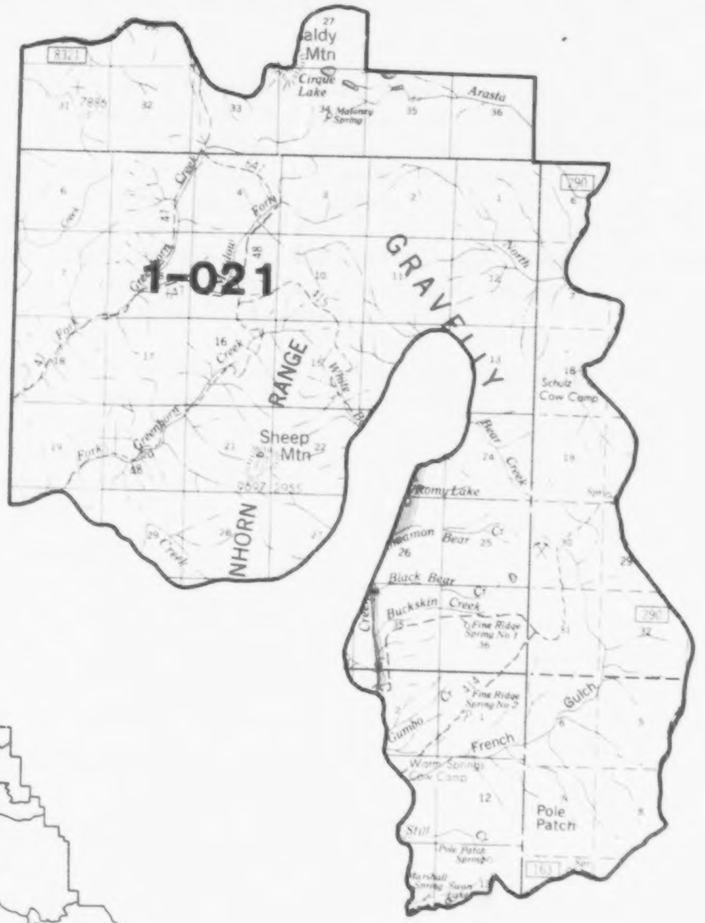
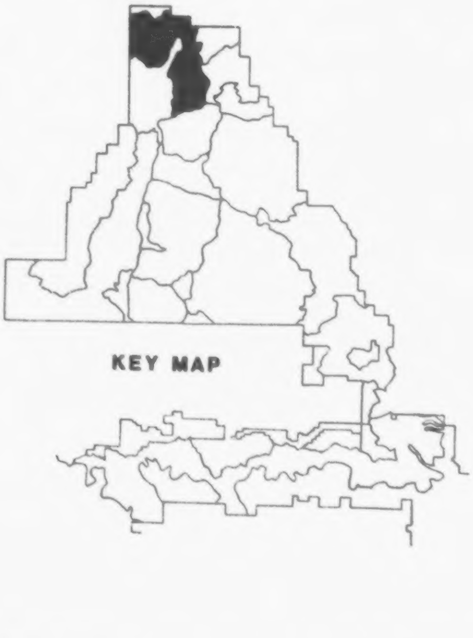
ROADLESS AREA 1-021

SHEEP MOUNTAIN


Baldy Mtn
Cirque Lake
Maloney Spring
Arasta
8321
7886
1-021
GRAVELLY
RANGE
SNOWCREST... NHORN
Sheep Mtn
Creek
Fork
Greenhorn
White
Bear Creek
Romy Lake
Black Bear
Buckskin Creek
Schulz Cow Camp
Fine Ridge Spring No 1
Fine Ridge Spring No 2
Gumbo Cr
French
Gulch
Warm Springs Cow Camp
Pole Patch
Pole Patch Spring
Marshall Spring
Swan Lake
290
161



GRAVELLY PLANNING UNIT

0 1 2 3 Miles
Scale

Roadless Area Name: 1-021 Sheep Mountain	Gross Acres	Net Acres
	32,374	32,115

I. DESCRIPTION

The Sheep Mountain roadless area is located in the north end of the Gravelly Planning Unit, Sheridan and Madison Ranger Districts, Beaverhead National Forest. It is located north of the Ruby River and contains land in the Idaho, Greenhorn and Warm Springs Creek drainages. Access is via the Ruby River - Timber Creek roads on the Sheridan District and the Call and Gravelly Range roads on the Madison District.

The west side of the Greenhorn Range has steep, rugged, tree-covered slopes with drainages heading on the main crest of the Gravelly or Greenhorn Ranges. The middle of the area is a broad grassland intermixed with Douglas-fir, lodgepole pine and aspen stands and drained by Warm Springs Creek; with the east and north being broken grassland benches with tree-covered north slopes. Elevations range from about 6,400 feet to 9,700 feet.

Soils are generally sandy loams derived from metamorphic rocks, chiefly gneiss. Silt loams and loams derived from limestone occur along the alpine ridge on the east side of the area. The Warm Springs portion contains many mass failure soil slumps.

Lower elevation and south-facing slopes are grassland and sagebrush/grassland, with open stands of Douglas-fir. Mountain mahagony is common on lower elevation south-facing slopes. North slopes at mid-elevations are forested with lodgepole pine, Douglas-fir and Engelmann spruce.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The area appears from the surrounding lands as a steep timber-covered range of mountain, then, when atop the mountain, it opens up into a gentle grassland with benches and slopes.

The area can be viewed from Highway 287 and several county roads. Fences, cow camps and water developments for the management of domestic livestock have been in this area for over 50 years. There are also low quality roads intruding into the area, which are used by public and private managers. In 1980, a major development for placer gold mining was undertaken. There has been past evidence of mineral activity which is scattered throughout.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude, primitive recreation and challenging experiences are affected by the size, open grassland viewing and lack of topography relief. Therefore, there is a feeling of expansiveness and the illusion, if not fact, of lack of constraints on movement and activities. The Greenhorn relief and tree cover provide more opportunities for enclosed experiences. The area is easily traversed by cross-country travel.

C. PRIMITIVE RECREATION OPPORTUNITIES

see above.

D. OTHER FEATURES

E. MANAGEABILITY AND BOUNDARIES

This area would be difficult to manage as a designated wilderness because there are no defined topographical boundaries between National Forest roadless and developed lands. The area is surrounded by BLM and private lands that are used for grazing. This area could be managed as wilderness, but it would be difficult to prevent intrusion by motorized vehicles because of historical travel uses and the open terrain of the area.

This area meets the size criteria for wilderness. There are no contiguous areas or other public lands that could be combined with this roadless area because of existing roads.

1977 Inventory Acres:	31,700 gross	31,063 net
1983 Inventory Acres:	32,374	32,115
Change	+ 674	+ 1052

Inventory acres changed as a result of acreage recalculation in the current planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

SHEEP MOUNTAIN ROADLESS AREA
Area Descriptor: 1-021

CATEGORY	UNIT	VALUE	CATEGORY	UNIT	VALUE
Gross Acres	acres	32,374			
Net Acres	acres	32,115			
Recreation			Deer		
Primitive	RVD'S	412	Winter Habitat	Acres	425
SPNM	RVD'S	600			
SPM	RVD'S	593	Significant Fisheries		
			Stream miles	Miles	46.8
Range			Stream Habitat	Acres	7.7
			Lakes	# of	7
			Lakes-Habitat	Acres	38
Existing obligated suitable	Acres	21,326			
Allotments	# of	5	Water Developments		
AUM'S	AUM'S	5965	Existing	# of	0
Existing vacant suitable	Acres				
Allotments	# of	0			
Timber			Minerals Favorability		
			Very High	Acres	1500
Tentative suitable	Acres	12,459	High	Acres	14,801
Standing Volume	MBF	66,400	Moderate	Acres	15,814
			Low	Acres	0
Corridors			Claims	# of	89
Existing and Potential	# of	1			
			Oil and Gas Favorability		
			Very High	Acres	0
Wildlife T & E			High	Acres	32,115
Bald Eagle	Acres	288	Moderate	Acres	0
			Low	Acres	0
Big Game					
Winter Habitat	Acres	2682	Oil and Gas Leases		
			Leased area	Acres	28,201
Elk					
Winter Habitat	Acres	1124			

1. Recreation

The recreation use of this area is dispersed camping and hunting. Motorized travel is currently restricted to designated travel routes with snowmobiling allowed after December 1, except on key winter range.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance for the public are big game species such as elk, mule deer, mountain lion, and black bear. Sporadic gray wolf activity (an endangered species) was recorded for the area in the 1970's. Upland game birds, such as the ruffled, spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially furbearers and raptor species such as the golden eagle and ferruginous hawk. Big game winter range occurs from Idaho Creek southward to the Ruby River, then to Warm Springs.

Idaho, Greenhorn and Warm Springs Creeks contain fisheries. Romy Lake is located in this area.

3. Water

Natural water turbidity is low and all continuous flowing streams support fish. Water is used for downstream irrigation.

4. Livestock Operations

The major use of this area is for permitted domestic livestock grazing. Future structural and nonstructural improvements will be needed to maintain and improve the forage resource of the area.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of the forested area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas. Lower elevations are characterized by rolling grassland and grass/sagebrush steppes.

6. Timber

There are currently defined timber base acreages in this area. They are of the productivity potential for management of timber.

7. Minerals/Oil and Gas

The geologic favorability for locatable minerals is high to very high (50%) and moderate (50%). Both talc and placer gold claims within the area have undergone active exploration recently. A placer mine development within the area has been reclaimed recently, but may experience renewed activity. The Willow Creek talc mine, a past producer, is located adjacent to the area. Approximately 1500 acres have very high geologic favorability for talc. The geologic favorabililty for oil and gas is high. Oil and gas leasing and geophysical prospecting have occurred, and are expected to continue.

8. Cultural Resources

The potential for prehistoric and historic cultural resources is unknown. However, past native American use of the Gravelly Range suggests that undiscovered sites may exist.

9. Land Use Authorizations

There are no land use authorizations.

10. Non-Federal Lands
There are 259 acres of private land in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire occurrence in this area is low to moderate.

2. Insect and Disease
The lodgepole stands are susceptible to infestation by bark beetles from adjacent now-infested lands.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The nearest designated wilderness is the Lee Metcalf Wilderness which is approximately 20 miles east. The nearest population centers are Butte and Bozeman, each more than 90 miles away.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
In 1972 portions of Roadless Area 1-021 were inventoried as roadless: #48 (Sheep Mountain) and #54 (Baldy Mountain). Part of the current roadless area was also identified in the RARE I effort as essentially roadless. None of the area identified as roadless or essentially roadless was selected as a wilderness study area candidate through the RARE II process.

The Sheep Mountain area was inventoried as roadless in the 1977 RARE II process. The wilderness potential of the roadless area was evaluated in the Forest planning process that was being conducted concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS designated lands within this roadless area for resource uses other than wilderness. Consequently, the Sheep Mountain roadless area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decision made for this roadless area did not appear to be controversial to Forest publics.

The Sheep Mountain area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range and watershed values of these areas. Opponents wrote that the areas had "no special qualities," were roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement there was less concern expressed about wilderness designation than for retaining the roadless character of this area. The Greater Yellowstone Coalition has identified this area as part of the Greater Yellowstone Ecosystem.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Sheep Mountain Roadless Area (1-021)

Management Emphases	A	B	C	D	F	G	H*	I	W	S**
	Alternative (Net Acres)									
Group 1: (Wilderness)	0	0	32,115	0	0	0	0	32,115	0	0
Group 2: (Timber)	7708	8029	0	642	8350	8028	6423	0	8029	3971
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	6423	0	0	321	8029	2569	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	24,407	8029	0	30,831	16,058	9635	10,598	0	16,057	14,434
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	9634	0	642	7386	6423	12,525	0	8029	13,710
TOTAL:	32,115	32,115	32,115	32,115	32,115	32,115	32,115	32,115	32,115	32,115

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	A	B	C	D	F	G	H	I	W	S
	Alternative (Net Acres)									
Roaded:										
Decade 1	4046	4654	0	0	4977	12,459	3580	0	11,565	2840
Decade 5 *	10,668	8249	0	0	22,275	12,459	8123	0	11,565	5671
Roadless:										
Decade 1	28,069	27,461	0	32,115	27,138	19,656	28,535	0	20,550	29,275
Decade 5 *	21,447	23,866	0	32,115	9840	19,656	23,992	0	20,550	26,444
Wilderness:	0	0	32,115	0	0	0	0	32,115	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. **Designation: Wilderness**
   Management Emphasis: Wilderness

The Sheep Mountain Roadless Area (1-021) is designated wilderness in Alternatives I and C.

wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. The grassland with benches and slopes located within the steep timber-covered range of mountain would remain in its natural condition.

Recreation use would remain largely as it is now, with few changes in the type of use. Hunting would still be the predominant use, although the use of motorized equipment would be prohibited. Presently, there is not alot of motorized use in the Forks of Greenhorn with some use in the Middle Fork of Warm Springs Creek. Access is already provided by roads that surround the area.

The 12,459 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 66 MMBF in standing volume.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 5,965 AUM's, could continue on the portions of the five allotments involved but management practices may change if wilderness designation were to preclude the use of motorized vehicles to access and manage livestock within affected allotments.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. The risk of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System, provide representations of low and mid-elevation grass and grass-sagebrush steppes, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir.
>
> Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Grazing would be continued in the area thus continuing support to grazing operators. Hunting and other recreational experiences would continue to be available in the roadless setting.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Approximately 1500 acres have very high geologic favorability for talc deposits located in the forks of Idaho across Greenhorn..

Exercise of valid existing rights on 89 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character. Most of the 89 claims exist as groups of half a dozen contiguous claims, minerlalization is not too widespread in this area.

As of December, 1983, there were approximately 28,201 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area. Once leases expire without discovery, then the area will be withdrawn from mineral entry.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Sheep Mountain Roadless Area (1-021) are assigned these prescriptions in all Alternatives except C and I; from 12 percent in Alternative S (the Proposed Action) to 26 percent in Alternative F. Alternative D assigns two percent of the area to these prescriptions.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. At most 26 percent of this area is in this emphasis and most of the cutting units are not visible from outside the unit. Most timber activity planned are within the Idaho and Greenhorn Creek drainages.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Primarily in the Idaho Creek and North Fork Greenhorn Creek areas, range resources would benefit by the creation of transitory range which may become available for grazing. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality would be modified and activities will dominate the landscape. Cutting will be evident in the Idaho and Greenhorn Creek drainages as well as in nontimbered areas where roading occurs.
>
> The opportunities for primitive and semi-primitive recreation could be reduced or eliminated under these prescriptions.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The

degree of these security cover losses will relate to the magnitude of the timber harvest in the area.
Water quality and fisheries could be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

Timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Between 1 to 25 percent of the Sheep Mountain Roadless Area (1-021) is assigned these emphases in Alternatives B, F, G, and H.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

Sagebrush manipluation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.

Habitat for elk and moose could be adversely effected by conversion of some sagebrush-grassland to pure grassland.

Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Between 30 and 96 percent of the Sheep Mountain Roadless Area (1-021) is assigned these emphases in all Alternatives but C and I.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Security cover for large game animals, primarily elk and moose, will be maintained.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and increase the hazards from wildfire. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed. Mineral exploration could occur.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. Approximately 1500 acres have very high geologic favorability for talc.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Sheep Mountain Roadless Area (1-021) are assigned these management emphases in Alternatives B, D, F, G, H, W and S; from 20 percent in Alternative G to 43 percent in Alternative S (the Proposed Action). Alternative D assigns only 2 percent of the area to these management emphases.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area; however these impacts will be relatively site-specific.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

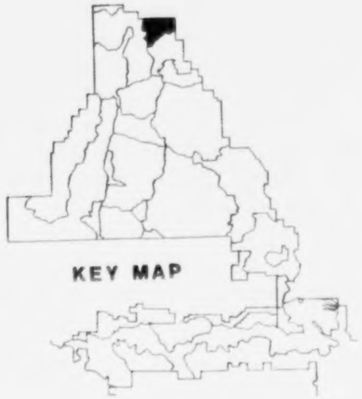
> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality could be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there could be opportunities to improve fisheries habitat in parts of Warm Springs Creek.

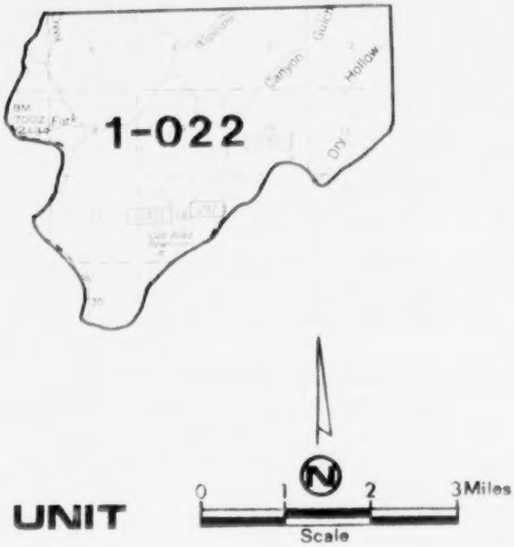
Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Approximately 1500 acres have very high geologic favorability for talc.

ROADLESS AREA 1-022

CROCKETT LAKE





GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-022 Crockett Lake	Gross Acres	Net Acres
	6,830	6,830

I. DESCRIPTION

The Crockett Lake Roadless Area is on the northeastern tip of the Gravelly Range approximately 14 air miles southwest of Ennis. The area is bounded on the south by the Call Road (292) which provides the primary access. The area is bounded on the west by the Gravelly Range Road (290) which provides secondary access from State Highway 287. The self-guided Gravelly Range Tour Road provides the northern boundary of this unit.

Lower Wigwam Creek and its forks run through the middle of the roadless area. Rolling grassland surround the steep sideslopes of Wigwam Creek and give a dominant grassland appearance as viewed from the Call Road. Some stands of lodgepole pine grow on the benches and on the north-facing slopes of Wigwam Creek. Scattered limber pine grows on dry ridges and south-facing slopes. Small scattered stands of Douglas-fir also occur. All forested areas combined comprise about 22% of the area. The grassland area in general has deep productive soils and provides a significant amount of high quality forage. The elevation ranges between 6,500 and 8,000 feet. The annual precipitation is from 20 to 30 inches and falls mostly in the form of snow. Temperatures vary from summer highs in the 90's to winter lows approaching 40 below zero.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The Crockett Lake Roadless Area has not been permanently impacted, but man's influence is apparent in fence and water developments, wheel tracks and vegetative manipulation. This area has been intensively managed for domestic grazing. Fences and water developments are easily visable throughout most of the area. Current vegetation manipulation includes spraying and burning. Two cow camps are located on the Forest to facilitate livestock management.

This area is penetrated from the south by two jeep trails that are each approximately a mile long. A number of other wheel tracks are visable in the vicinity but are currently closed to driving.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude are impaired by the small size and the openness of the country.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunities for primitive recreation are impaired by the small size and the openness of the country.

D. OTHER FEATURES

There are no significant topographical, geographical or cultural features in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

The area, as delineated, is a manageable unit. Decreasing the size to exclude portions with a high density of range improvements and wheel tracks would result in an extremely small area with unmanageable boundaries.

This unit is contiguous to roadless areas 1-021 Sheep Mountain and 1-023 Cherry Lakes. It is separated from these areas, however, by roads.

1977 Inventory Acres:	6700 gross	6700 net
1983 Inventory Acres:	6830	6830
Change	+ 130	+ 130

Change in inventory acres is the result of acre recalculation in the current planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CROCKETT LAKE ROADLESS AREA
Area Descriptor: 1-022

CATEGORY	UNIT	VALUE	CATEGORY	UNIT	VALUE
Gross Acres	acres	6830			
Net Acres	acres	6830			
Recreation			Deer		
Primitive	RVD'S	75	Winter Habitat	Acres	1762
SPNM	RVD'S	109			
SPM	RVD'S	108	Significant Fisheries		
			Stream miles	Miles	6.5
Range			Stream Habitat	Acres	3.1
			Lakes	# of	0
			Lakes-Habitat	Acres	0
Existing obligated suitable	Acres	4662			
Allotments	# of	2	Water Developments		
AUM'S	AUM'S	1525	Existing	# of	0
Existing vacant suitable	Acres	0	Minerals Favorabilility		
Allotments	# of	0	Very High	Acres	0
			High	Acres	0
Timber			Moderate	Acres	6830
			Low	Acres	0
Tentative suitable	Acres	1929	Claims	# of	1
Standing Volume	MBF	11,169			
			Oil and Gas Favorability		
Corridors			Very High	Acres	0
			High	Acres	0
Existing and Potential	# of	1	Moderate	Acres	6830
			Low	Acres	0
Wildlife T & E					
Bald Eagle	Acres	0	Oil and Gas Leases		
			Leased area	Acres	4410
Big Game					
Winter Habitat	Acres	4088			
Elk					
Winter Habitat	Acres	1753			

1. Recreation

In the summer months the area is used for recreational driving, wildflower photography, and observing wildlife. In the early fall a large number of people use the area for archery hunting and grouse hunting because of its close proximity to Ennis. During the general big game season the area is heavily hunted for deer and elk. A small amount of antelope hunting also occurs. In the winter the area is very popular for snowmobiling because of its open gentle terrain and easy access from Ennis. The potential for cross-country skiing is low because of the distance from the trail head across wind-swept terrain. This area has a high potential for increased snowmobile recreation.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, and black bear. Upland game birds, such as blue and spruce grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially furbearer and raptor species such as the golden eagle and ferruginous hawk.

The area includes a small amount of elk and deer winter range. It also provides spring elk transition range before the Call road is open to driving.

There is a small resident fishery in Wigwam Creek. The stream is small and relatively high gradient. It does not have the potential to provide significant increases in recreational opportunity.

3. Water

This region is an important water producer. The upper reaches of major streams are intermittent.

4. Livestock Operations

The Crockett Lake Roadless Area includes portions of two cattle allotments. Two permittees run approximately 1500 head of cattle. All suitable rangeland is utilized by domestic livestock under rest-rotation grazing systems.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are contained mostly in riparian and wet areas. Rolling benches are representative of grassland and grass/sagebrush steppes.

6. Timber

There are approximately 1900 acres of suitable timber with approximately 11.2 MMBF of standing volume in this roadless area.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate. Mining activity has been limited. Geologic favorability for oil and gas is moderate. Oil and gas leasing and geophysical exploration have occurred and are expected to continue.

8. Cultural Resources

Several miners cabins still stand in the Wigwam Creek drainage. Other historic and prehistoric cultural sites are unknown. However, like all of the other roadless areas in the Gravelly Mountain Range, this unit has a high potential for cultural resources.

9. Land Use Authorizations
There are no land use authorizations.

10. Non-Federal Lands
No private acres are included in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
At the present time, fire occurrence is very low.

2. Insect and Disease
The mountain pine beetle is in epidemic proportions and is threatening all lodgepole pine. Without some timber harvest, this resource will be lost and fire incidence will increase.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The Lee Metcalf Wilderness Area is about 20 miles away and use there is low to moderate, except in the high-use area of Spanish Peaks. Bozeman, Montana is located within 60 miles; Butte, Montana is 90 miles; Billings, Montana is about 300 miles to the east.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
Most of area 1-022 was identified in RARE I as essentially roadless. However, the area was not selected as a wilderness study area candidate through that process.

The Crockett Lake area was inventoried as roadless in the 1977 RARE II process. The wilderness potential of the roadless area was evaluated in the Forest planning process that was being conducted concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS assigned lands within this roadless area for resource uses other than wilderness. Consequently, the Crockett Lake roadless area was dropped from further wilderness consideration in RARE II. The wilderness/ nonwilderness decision made for this roadless area did not appear to be controversial to Forest publics.

The Crockett Lake area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range of this area. Opponents wrote that the area had "no special qualities," was roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was concern expressed that the roadless areas in the Gravelly Range remain roadless. There was little support expressed for wilderness designation of these areas. The Greater Yellowstone Coalition has identified this area as part of the Greater Yellowstone Ecosystem and has expressed interest in wilderness designation for this and other roadless areas in the Gravelly Planning Unit.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Crockett Lake Roadless Area (1-022)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	6830	0	0	0	0	6830	0	0
Group 2: (Timber)	888	1366	0	0	1366	990	1366	0	683	0
Group 3: (High Range, High Range with Low Intensity Wildlife No Timber)	0	0	0	0	68	2048	2391	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	5942	3415	0	6830	3415	2084	1366	0	4098	2334
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	2049	0	0	1981	1708	1707	0	2049	4496
TOTAL:	6830	6830	6830	6830	6830	6830	6830	6830	6830	6830

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	6830	1576	0	0	1516	250	1506	0	893	0
Roadless:										
Decade 1	6830	6830	0	6830	6830	6830	6830	0	6830	6830
Decade 5 *	0	5254	0	6830	5314	6580	5324	0	5937	6830
Wilderness:	0	0	6830	0	0	0	0	6830	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Crockett Lake Roadless Area 1-022 is designated as wilderness in Alternatives C and I.

Wilderness can enhance the area's wilderness attributes since many of the existing uses and facilities are not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, such as access to permittee cow camps, could be used for foot travel to the places of interest in the area. Without snowmobile use, these trails would be naturally narrowed in time.

The 1929 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 11.2 MMBF in standing volume.

The small loss in timber volume may be mitigated by increasing the intensity of timber management on area lands outside this that remains in the timber base.

Current livestock grazing, 1525 AUM's, could continue on the portions of the two allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. Wilderness designation would limit use of vehicles and permittees would have to make use of horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats for deer and elk would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> Existing visual quality would be retained. The assigned "preservation" VQO would be difficult to fully achieve because the openess of this area allows fences and water developments to dominate the view.

Wilderness designation would increase the land base in the Wilderness Preservation System.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate. Big game hunting opportunity would remain essentially unchanged due to the size and shape of the area.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated over time by Douglas-fir rather than by sagebrush.

Water quality and the fisheries in Wigwam Creek would be maintained at natural levels.

Social and economic effects center around the resource values of oil and gas, range, wildlife, recreation, and wilderness. The service sector, including outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, much of the everyday operations probably would be managed by horse rather than by truck. This change could require more time and higher costs to the grazing operators. Hunting and other recreational experiences achieved with motorized vehicles would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. When the current oil and gas leases expire, the area will be withdrawn. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Crockett Lake Roadless Area (1-022) are assigned timber prescriptions in all Alternatives except C, D, I and S. Approximately 14 percent of the area is assigned these emphases in Alternatives A and G; 20 percent of the area is assigned in Alternatives B, F and H. Only 10 percent is assigned to these emphases in Alternative W.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

A visual quality objective of retention/partial retention applies along the Call road and Gravelly Range road. There will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities from these roads.

New roads constructed for timber harvest, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for primitive and semi-primitive recreation opportunities will be reduced or eliminated under these prescriptions. Elk security will be reduced if existing stands are removed from cover capability. Security cover currently is less than the optimum percentage needed for the total area. Therefore loss of the existing security (hiding) cover would have an adverse effect on elk habitat.
>
> Water quality and fisheries in Wigwam Creek would be affected under Alternatives B and G.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Even-age harvest will favor seral stands of lodgepole pine with some Douglas-fir.

Social and economic effects center around the resource values of timber, oil and gas, wildlife, recreation, grazing, and wilderness. Timber and oil and gas resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. A small amount of transitory range is created for livestock use.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Crockett Lake Roadless Area (1-022) are assigned these prescriptions in Alternatives F, (one percent), G (30 percent) and H (35 percent).

Under these prescriptions, motorized use will likely increase for range management purposes. Structural and, to a lesser extent, prescribed burning of sagebrush, will impact the naturalness of the area. The number of such activities could be expected to increase.

The continued and increasing use by more people tends to reduce the naturalness of and opportunities for solitude in the area. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential. Increases in livestock use result from better utilization of existing forage, rather than increased production of forage. Increased livestock use would limit potential increases in elk and deer populations.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Hiking and archery hunting recreation opportunities may be affected under some of these prescriptions.
>
> Water quality and the existing fisheries in Wigwam Creek will be maintained.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Between 20 and 100 percent of the Crockett Lake Roadless Area (1-022) is assigned these prescriptions in all Alternatives but C and I. 20 percent of the area is assigned in Alternative H; 100 percent of the area is assigned in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. Alternatives A and D retain 90 and 100 percent, respectively, of the area as roadless. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Visual quality will be retained unless roading occurs for special uses, oil and gas development, or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations and other service-oriented businesses. Oil and gas exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
   Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Crockett Lake Roadless Area (1-022) are assigned these prescriptions in Alternatives B, F, G, H, W and S; from 25 percent in Alternatives G and H to 66 percent in Alternative S (the Proposed Action).

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. road building in these areas, to access other management areas, could be expected to cause the most severe and longest-term impacts to the wilderness/ roadless capabilities of the area.

Range activities on acres managed under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few adverse impacts on primitive and semi-primitive recreation opportunities. Unless roads are constructed for oil and gas development or Custodial management also allows road construction for access to other management areas.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> In general, water quality and fisheries would be unaffected. Under the riparian management, there will be opportunities to improve fisheries habitat in Wigwam Creek.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife is to be avoided. Oil and gas exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

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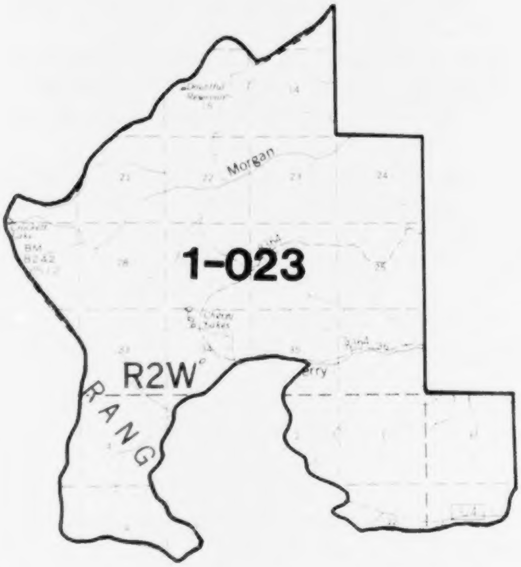
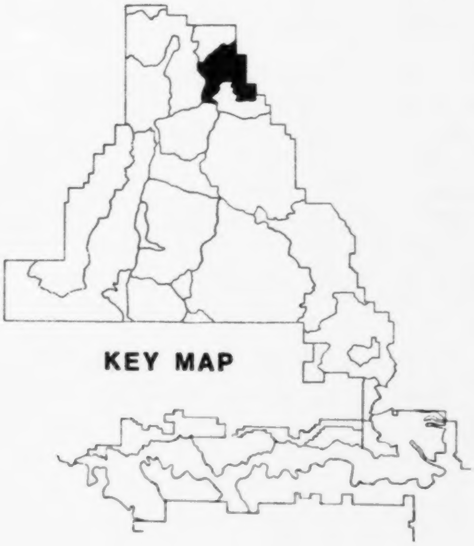
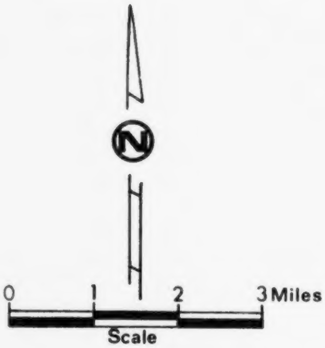
ROADLESS AREA 1-023

CHERRY LAKES


1-023
Morgan
R2W
RANG



KEY MAP


N
0
1
2
3 Miles
Scale

GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-023 Cherry Lakes	Gross Acres	Net Acres
	12,940	12,940

I. DESCRIPTION

The Cherry Lakes Roadless Area is located in the northeast end of the Gravelly Mountain Range. The area includes most of Cherry Creek and Morgan Gulch on the east slope of the Gravelly Range. Access is from the Call road on the north, Gravelly Range road on the west, and Johnny Gulch road from the south.

This area is typified by broad ridges, deep canyons and sharp breaks. Elevations range from 6,500 to 8,500 feet.

Shallow, rocky loams and silt loams derived from limestone dominate the east half of this unit. The west half contains moderately deep loams, clay loams and silty clays derived from a variety of sedimentary rocks, chiefly shales and sandstones.

The area is open grassland with patches of timber. The primary tree species are lodgepole pine and Douglas-fir. Sagebrush is prevalent in the grassland. There is a rich mosaic of grassland, timber sagebrush, and small wet meadows surrounded by timber. Small aspen stands occur in some places. Subalpine grassland occurs along the top of the Gravelly Range.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Because of its rough terrain, the Cherry Lakes Roadless Area has a very scenic and natural appearance. The only exception is the Johnny Ridge area where there is a view of a large timber sale area where several million board feet of timber has been removed.

B. OPPORTUNITIES FOR SOLITUDE

Even though the general topography of the area is relatively diverse and rough, opportunities for solitude are limited. The shape and small size, the location of roads around the area, the close proximity of the Cyprus Talc Mine, and the nearness of the developments in Madison Valley impact opportunities for solitude in this roadless area.

C. PRIMITIVE RECREATION OPPORTUNITIES

The area is too small and too close to many of man's activities to have much primitive recreation opportunity; it does not provide any challenging experiences.

D. OTHER FEATURES

There are no special topographical, geographical or cultural features in this roadless areas.

E. MANAGEABILITY AND BOUNDARIES

This region is large enough to be manageable for wilderness, however, with the intrusion of the Johnny Ridge Timber Sale, some boundary changes would be desirable. Elimination of some of the area would not substantially change wilderness desirability.

1977 Inventory Acres:	14,700 gross	14,700 net
1983 Inventory Acres:	12,940	12,940
Change	- 1760	- 1760

Change in inventoried acres is due to acre recalculation done in the Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CHERRY LAKES ROADLESS AREA
Area Descriptor: 1-023

CATEGORY	UNIT	VALUE
Gross Acres	acres	12,940
Net Acres	acres	12,940
Recreation		
Primitive	RVD'S	175
SPNM	RVD'S	255
SPM	RVD'S	252
Range		
Existing obligated suitable	Acres	9175
Allotments	# of	5
AUM'S	AUM'S	2606
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	4832
Standing Volume	MBF	27,956
Corridors		
Existing and Potential	# of	1
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	8750
Elk		
Winter Habitat	Acres	3722

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	3853
Significant Fisheries		
Stream miles	Miles	3.5
Stream Habitat	Acres	0
Lakes	# of	6
Lakes-Habitat	Acres	7
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	160
High	Acres	6310
Moderate	Acres	6470
Low	Acres	0
Claims	# of	4
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	12,940
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	7310

1. Recreation

Heaviest recreation use occurs during the fall hunting season for deer and elk. Wood gathering, camping and scenic driving occur in the summer. The area receives significant snowmobile use due to open gentle slopes and close proximity to Ennis.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion and black bear. Sporadic gray wolf activity (an endangered species), was recorded for the area in the 1970's. Upland game birds, such as sage grouse, spruce and blue grouse are also found in this unit. Except for grizzly bear reports, no threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially furbearers and raptor species such as the golden eagle and ferruginous hawk.

The elk population in the entire Gravelly Range is highly productive, heavily hunted, and is important both within the state and on a national basis. This roadless area provides valuable elk habitat including an elk calving ground. Because of the small size of this area and its close proximity to major roads, the suitability of the area for elk is enhanced by roadless management. Because of the relatively high percentage of open areas, maintaining existing security cover is also important to preserving the quality of elk habitat.

3. Water

There are no major tributaries to the Madison River in this roadless area. Cherry Creek does not contain live water in the canyon bottom. The stream in Morgan Gulch is usually dry by late summer.

4. Livestock Operations

Parts of five cattle allotments with 2606 AUM's are included in this area; there are four grazing permits allowed. Most of the area is suitable for intensive livestock management under rest-rotation grazing systems. Range improvements such as fence, pond and spring developments are common.

5. Ecology

The area is predominantly representative of grass and grass/sagebrush steppes with seral lodgepole stands occurring at the higher elevations, and on north slopes.

6. Timber

There are approximately 4,800 acres of suitable timber in this roadless area.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate (50%) to high (49%) to very high (1%). Exploration in talc has occurred within and adjacent to this area. Geologic favorability for oil and gas is moderate. Geophysical exploration and oil and gas leasing have occurred and are expected to continue. Cyprus Industrial Minerals, Inc., has unpatented talc claims in lower Johnny Gulch adjacent to the existing Yellowstone Talc Mine and is currently doing exploration work.

8. Cultural Resources

The potential for prehistoric and historic cultural and historic cultural resources is unknown.

9. Land Use Authorizations

There are no land use authorizations in the unit.

10. Non-Federal Lands

There are no private lands included in this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

The area has a very low incidence of fire, however, fire hazard would be increased without some timber harvest.

2. Insect and Disease

A mountain pine beetle epidemic is killing the lodgepole pine timber. Wilderness designation would prevent salvage of this timber.

IV. NEED

1. Proximity to Other Designated Wilderness and to Populations Centers.

The Lee Metcalf Wilderness (including Spanish Peaks) is within 15 miles; the Anaconda-Pintler is about 100 miles away. Use in the Spanish Peaks is high; with use low to moderate in other areas. Bozeman is 60 miles away; Butte is about 100 miles; Billings about 300 miles.

2. Contribution to Wilderness Preservation System

This area would contribute significant ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest

Portions of the Cherry Lakes Roadless Area were identified in the RARE I effort only as essentially roadless. None of the area was selected as a wilderness study candidate in that process.

The Cherry Lakes Roadless Area was inventoried as roadless in the 1977 RARE II inventory. The wilderness potential of the roadless area was evaluated in the Forest planning process that was being conducted concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS allocated lands within this roadless area for resource uses other than wilderness. Consequently, the 1-023 Roadless Area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decisions made for this roadless area did not appear to be controversial to Forest publics.

The Cherry Lakes area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range and watershed values of these areas. Opponents wrote that the area had "no special qualities," were roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

There has been little public interest expressed in a wilderness designation for this area. Those who have expressed an interest have favored a wilderness designation because of the "excellent big game range" in the area.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was concern expressed that the roadless areas in the Gravelly Range remain roadless. There was little support expressed for wilderness designaion of this area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Cherry Lakes Roadless Area (1-023)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	12,940	0	0	0	0	12,940	0	0
Group 2: (Timber)	2070	3235	0	0	2459	3882	4270	0	3235	1523
Group 3: (High Range, High Range with Low Intensity Wildlife, No Timber)	0	5176	0	0	129	4529	647	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	10,870	647	0	12,552	4529	1294	259	0	5823	2461
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlide No Timber)	0	3882	0	388	5823	3235	7764	0	3882	8956
TOTAL:	12,940	12,940	12,940	12,940	12,940	12,940	12,940	12,940	12,940	12,940

---

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	4670	12,940	0	0	12,940	12,940	6400	0	12,940	3653
Roadless:										
Decade 1	12,940	12,940	0	12,940	12,940	12,940	12,940	0	12,940	12,940
Decade 5 *	8270	0	0	12,940	0	0	6540	0	0	9287
Wilderness:	0	0	12,940	0	0	0	0	12,940	0	0

---

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Cherry Lakes Roadless Area (1-023) is designated as wilderness in Alternatives C and I.

wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 4832 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 28 MMBF in standing volume. The largest concentration of area suitable for timber production is on the north facing slopes of Morgan Gulch.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 2606 AUM's, could continue on the portions of the 5 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to limit this activity, permittees would have to adjust to more use of horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained except for some encroachment by timber in the long-term. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained. Wilderness designation would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System, provide significant ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature lodgepole pine stands in the lower elevations of this area will become highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be prohibited under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, many everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. While the geologic favorability for locatable minerals is moderate to high, mineral exploration activity has been limited in the recent past.

Exercise of valid existing rights on four mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character. There are approximately 160 acres of very high geologic favorability for locatable minerals, mainly talc.

As of December, 1983, there were approximately 7310 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Cherry Lakes Roadless Area (1-023) are assigned these prescriptions in all Alternatives except C, D and I; from 12 percent in Alternative S (the Proposed Action), to 33 percent in Alternative H. The largest contiguous area allocated to these prescriptions is on the north facing slopes above Morgan Gulch.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.

> Elk security will be reduced if existing stands are removed from cover capability. Cover is presently less than the optimum portion of the total area. Therefore, loss of existing cover would have a significant impact on elk habitat.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment to prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. There are approximately 160 acres of very high geologic favorability for locatable minerals, mainly talc.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Cherry Lakes Roadless Area (1-023) are assigned these prescriptions in Alternatives B (40 percent); F (less than 1 percent); G (35 percent) and H (5 percent).

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. There would be minor changes in recreational opportunities, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Portions of the Cherry Lakes Roadless Area (1-023) are assigned these prescriptions in all Alternatives except C and I; from only 2 percent in Alternative H to 97 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities providing 2606 AUM's would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. There are approximately 160 acres of very high geologic favorability for locatable minerals, mainly talc.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Cherry Lakes Roadless Area (1-023) are assigned these prescriptions in all Alternatives except A, C and I. Alternative D assigns the least (3 percent), and Alternative S (the Proposed Action) assigns the most (69 percent).

The effects of implementing these prescriptions could be expected to be similar to those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

The capacity of the elk habitat could be maintained and the high level of recreation (elk hunting) could be continued.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semiprimitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semiprimitive recreation activities will be adversely affected.

In general, water quality and fisheries in downstream areas would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby preventing increased Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. designatedion to prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. designatedion to prescription 8-10 would totally restrict access for mineral and energy resources. There are approximately 160 acres of very high geologic favorability for locatable minerals, mainly talc.

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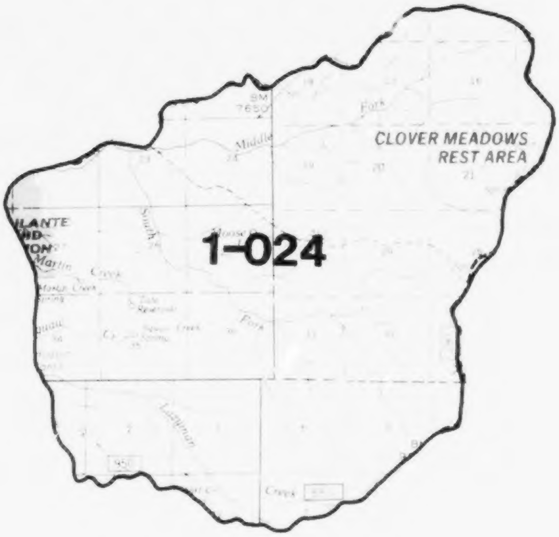
ROADLESS AREA 1-024

VIGILANTE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CLOVER MEADOWS
REST AREA
1-024
South
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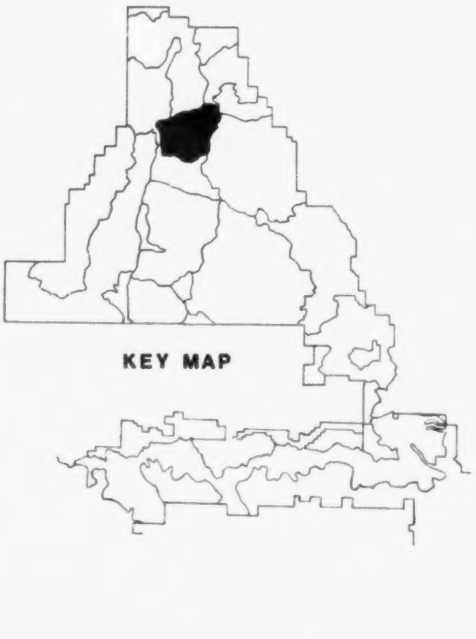

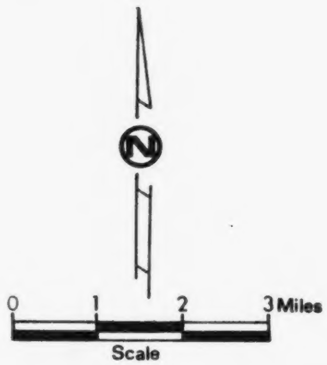
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GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

	Gross Acres	Net Acres
Roadless Area Name: 1-024 Vigilante	16,778	16,458

I. DESCRIPTION

The Vigilante Roadless Area is located approximately 35 miles southeast of Alder, Montana, in the Gravelly Planning Unit. It is bounded on the west by the Ruby River, north by Warm Springs Creek, east by Gravelly Range Ridge and south by the divide between Lazyman and Short Creek Divide. Access is from the Ruby River road #100, which is both a County and Forest Service road, and the Warm Springs road.

The area is mainly a broken series of ridges, steep slopes and benches culminating in the subalpine ridges that separate the Ruby and Madison River drainages. Soils are a clay-loam very broken by natural slump and slips areas.

Vegetation consists of sagebrush/grassland intermixed with stands of Douglas-fir, lodgepole pine, spruce, whitebark pine and aspen stands. This area is basically 50% sagebrush/grassland and 50% open old growth stands of timber with an understory of wet meadow/grassland species.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

This roadless area blends in with the ranching appearance of southwestern Montana. The total area has been grazed by domestic livestock since the 1880's. Human development has influenced the naturalness of the area through grazing fences, water development and motorized vehicles for the past 50 to 60 years. The area is part of the original Range Experimental Station where range management research was conducted for 20 years. These uses are subtle in nature, but have altered the naturalness of the area.

Moose Lake and Lazy Man jeep roads travel into the interior of the area from the north and the south, respectively. Warm Springs (#163), Gravelly Range (#290), and Gypsum Mine roads form the north, east, and south boundaries, respectively. These roads are visible from much of the interior of the roadless area. There are old four-wheel-drive tracks that are visible, although they are slowly revegetating as a result of implementation of the Travel Plan which restricts vehicles to designated routes in the area.

There is no topographical feature that cannot be climbed or traveled around. From the core, an individual can walk to a road within two hours or less.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude are limited, because the core of the area can be viewed from many other locations surrounding it. From the interior, other agricultural development on private lands is visible.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunities for primitive recreation are limited and lack diversity. The area's challenges are few.

D. OTHER FEATURES

There are no signifcant topographical, geographical or cultural features.

E. MANAGEABILITY AND BOUNDARIES

Adjusting the boundaries to eliminate both of the jeep roads would considerably reduce the size of this area.

1977 Inventory Acres:	16,300 gross	16,300 net
1983 Inventory Acres:	16,778	16,458
Change	+ 478	+ 158

Reasons for change in inventory acres:

F.Y. 1984 road Construction and Timber Sale	- 1,969	- 1,969
Acreage Recalculation	+ 2,447	+ 2,127

III. AVAILABILITY

A. RESOURCE POTENTIALS

VIGILANTE ROADLESS AREA
Area Descriptor: 1-024

CATEGORY	UNIT	VALUE
Gross Acres	acres	16,778
Net Acres	acres	16,458
Recreation		
Primitive	RVD'S	208
SPNM	RVD'S	304
SPM	RVD'S	300
Range		
Existing obligated suitable	Acres	11,592
Allotments	# of	4
AUM'S	AUM'S	4944
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	5747
Standing Volume	MBF	31,225

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	4859
Significant Fisheries		
Stream miles	Miles	14.7
Stream Habitat	Acres	3.5
Lakes	# of	5
Lakes-Habitat	Acres	11
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	0
Moderate	Acres	16,458
Low	Acres	0
Claims	# of	1

Resource Potentials, (continued)

Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	8293
Big Game		
Winter Habitat	Acres	10,885
Elk		
Winter Habitat	Acres	4216

Oil and Gas Favorability		
Very High	Acres	6577
High	Acres	9881
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	16,206

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1. Recreation

Present recreation use in the Vigilante Roadless Area is primarily hunting, with some hiking and backpacking. The current Travel Plan allows motorized travel only on designated routes and some snowmobiling along the top of the Gravelly Range.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, and black bear. Upland game birds, such as spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially furbearers and raptor species such as the golden eagle and ferruginous hawk.

3. Water

The Middle and South Forks of Warms Springs Creek eventually contribute water to the Ruby River. Moose Lake lies between the two forks of Warm Springs Creek.

4. Livestock Operations

The Vigilante Roadless Area has four allotments comprising approximately 11,600 acres of suitable rangeland, and providing 4944 AUM's of grazing. The area contains several miles of fences that divide the grazing allotments into pastures. Within the pastures are several water developments and dams for livestock water.

5. Ecology

There are four ecosystem types: 1) grassland/sagebrush; 2) Douglas-fir/pine grass; 3) whitebark pine/low brush huckleberry; 4) subalpine grass/sedge.

6. Timber

In the northeast portion of the area there is a stand of mature lodgepole pine and Douglas-fir. This stand is not presently infested with bark beetles. However, it is highly susceptible because of its close proximity to the current bark beetle infestation on the Madison side of the Gravelly Range.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate. Mining activity has been limited. Geologic favorability for oil and gas is high (60%) to very high (40%). Oil and gas leasing and geophysical exploration have occurred and are expected to continue. Approximately 20% of the area has high favorability for phosphate (leasable nonenergy mineral), which is not reflected in the favorability ratings for locatable minerals or oil and gas.

8. Cultural Resources

There are no known or currently located cultural resource sites in the area.

9. Land Use Authorizations

Currently, there are no land use permits.

10. Non-Federal Lands

There are 320 acres of non-Federal lands within this unit.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

The fire occurrence is low and suppression activities for a fire are light in nature. The major suppression activity would be harvest of lodgepole stands for bark beetles.

2. Insect and Disease

Timber stands are not yet infested by bark beetles. Future infestation is probable, because stands lie near other infested areas in the Gravelly Range.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The closest Congressional-designated wilderness is the Lee Metcalf Wilderness, within 15 air miles, or the moderately-used Anaconda-Pintler, approximately 50 air miles to the northwest.

Butte, Montana is the nearest population center, and it is located 90 miles to the northwest.

2. Contribution to Wilderness Preservation System

This area would contribute ecological diversity to the National Wilderness Preservation System. Low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief are poorly represented in the System, particularly in the Northern Rocky Mountains.

3. Public Interest

The Vigilante area was identified in the RARE I effort as essentially roadless. The area was not selected as a wilderness study candidate in that process.

The Vigilante area was inventoried as roadless in the 1977 RARE II inventory. The wilderness potential of the roadless area was evaluated in the Forest planning process being conducted concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS designated lands within this roadless area for resource uses other than wilderness. Consequently, the 1-024 Roadless Area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decisions made for this roadless area did not appear to be controversial to Forest publics.

The Vigilante area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range and watershed values of these areas. Opponents wrote that the areas had "no special qualities," were roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

There has been little public interest expressed in a wilderness designation for this area. Those who have expressed a desire for wilderness have based their concerns on preserving the "excellent big game range" and the "Ruby and Madison River watershed."

In public comments on the 1985 Revised Draft EIS and Proposed Plan Supplement, there was concern expressed that the roadless areas in the Gravelly Range remain roadless. THere was little support expressed for wilderness designation of this area. The Greater Yellowstone Coalition has identified this area as part of the Greater Yellowstone Ecosystem and has expressed interest in wilderness designation for this and other roadless areas in the Gravelly Planning Unit.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Vigilante Roadless Area (1-024)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	16,458	0	0	0	0	16,458	0	0
Group 2: (Timber)	1975	3292	0	0	3292	4115	0	0	4115	1442
Group 3: (High Range, High Range with Low Intensity Wildlife No Timber)	0	2469	0	165	165	3292	165	0	329	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	14,483	2469	0	15,964	4115	2469	4115	0	4937	3052
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	8228	0	329	8886	6582	12,178	0	7077	11,964
TOTAL:	16,458	16,458	16,458	16,458	16,458	16,458	16,458	16,458	16,458	16,458

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	3119	3588	0	0	3836	4609	0	0	5747	0
Decade 5 *	3119	16,458	0	0	5852	4609	0	0	5747	0
Roadless:										
Decade 1	13,339	12,870	0	16,458	12,622	11,849	16,458	0	10,711	16,458
Decade 5 *	13,339	0	0	16,458	10,606	11,849	16,458	0	10,711	16,458
Wilderness:	0	0	16,458	0	0	0	0	16,458	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Vigilante Roadless Area (1-024) is designated as wilderness in Alternatives C and I.

wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. There is some vehicular activity along a seasonally closed road that runs to Squaw Creek Spring. The trail/primitive road to Moose Lake is moderately used during hunting season but could be eliminated. Snowmobile use is concentrated around perimeter of area and would not be severely affected. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area.

The 5747 acres of land tentatively suitable for timber production would not be available under this emphasis. This would remove about 31.2 MMBF in standing volume. The bulk of the timber in this area is located in the vicinity of the South Fork of Warm Springs and the Middle Fork. Access would be difficult and expensive because of potential land slumping and because of the need to avoid riparian zones in road building activities.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 4944 AUM's, could continue on the portions of the four allotments involved. Management practices would not significantly change, because the area is presently managed with considerable horseback use. If wilderness designation were to preclude the use of motorized vehicles; however, there might be some minor changes in alloment management that is now done using vehicles.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource but this area has already been developed sufficiently for these purposes to preclude any further changes.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands. There is winter range across the western edge of the unit for elk and deer.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor. The area is surrounded by roads, so visual quality needs to be maintained.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. Presently a beetle epidemic is occurring in the adjacent Madison side of the Gravelly Range. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of range, wildlife, minerals, timber, and wilderness qualities. These are the major resourse values of this unit. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change would not significantly affect grazing operators since some operations are already conducted on horseback. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Approximately 40 percent of the area has very high geologic favorability for oil and gas.

Exercise of valid existing rights on 1 mining claim will be severely restricted.

As of December, 1983, there were approximately 16,206 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area. Continued oil and gas exploration in this area can be expected.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Vigilante Roadless Area (1-024) are assigned these emphases in all Alternatives except C, D, H and I; from 9 percent in Alternative S (the Proposed Action) to 25 percent in Alternatives G and W.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would not benefit significantly by the creation of transitory range which may become available for grazing, since the timber is confined primarily to portions of two drainages. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas, since this area is surrounded by roads.

The opportunities for primitive and semi-primitive recreation opportunities would not be severely reduced.

Elk security would not be severely affected but long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses relate to the magnitude of the timber harvest in the area.

Water quality and fisheries would not be greatly affected since the greater part of the elk winter range is west of timbered areas.

In areas whre visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

Social and economic effects center around the resource values of grazing, wildlife, recreation, timber, minerals, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for some jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment.Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources.

Approximately 40 percent of the area has very high geologic favorability for oil and gas.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Vigilante Roadless Area (1-024) are assigned these emphases in all Alternatives except A, C, I and S; from as little as 1 percent in Alternatives D, F and H to 20 percent in Alternative G.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of unimproved wheeltracks could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. These impacts would be as severe as those associated with timber harvest, since this area contains as much range/grassland as timber.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities may be adversely affected under some of these emphases.
>
> Burning for range improvement would maintain some timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Portions of the Vigilante Roadless Area (1-024) are assigned these prescriptions in all Alternatives except C and I; from 15 percent (Alternatives B and G); to 97 percent (Alternative D).

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline. roading of this area would be difficult due to potential land slumping and a great need for roads does not exist. Much of this area is leased for oil and gas (40 percent).

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under these prescriptions would not contribute significant changes. Eventually a beetle epidemic may kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations and other service-oriented businesses. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. Approximately 40% of the area has very high geologic favorability for oil and gas.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Vigilante Roadless Area (1-024) are assigned these emphases in all Alternatives except A, C and I; from only 2 percent in Alternative D to 74 percent in Alternative H.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semiprimitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semiprimitive recreation activities will be adversely affected.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Approximately 40 percent of the area has very high geologic favorability for oil and gas.

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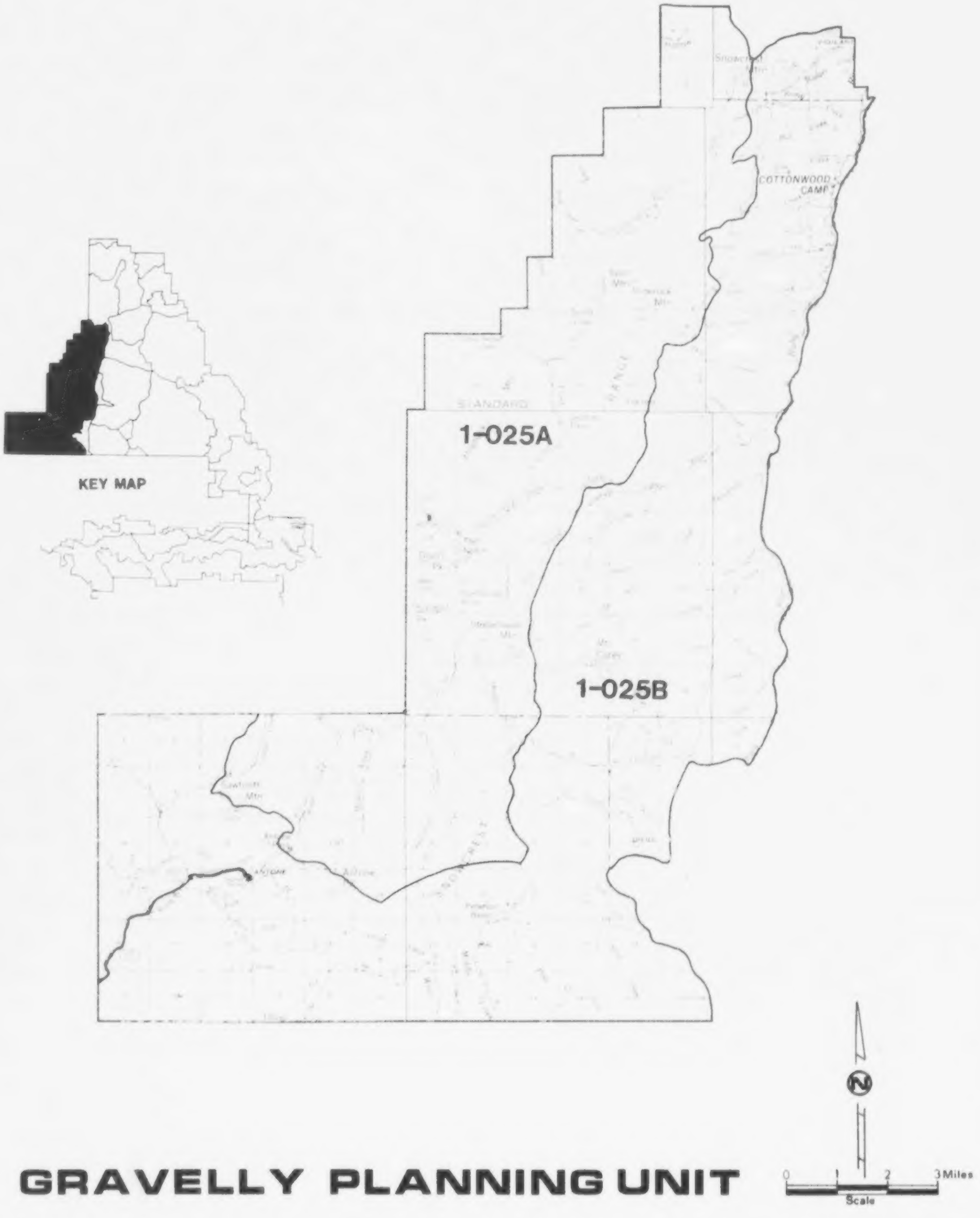
ROADLESS AREA 1-025

SNOWCREST MOUNTAIN


COTTONWOOD CAMP
STANDARD
1-025A
1-025B
KEY MAP
N
0
1
2
3 Miles
Scale

GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-025 Snowcrest Mountain	Gross Acres	Net Acres
1-025A	39,021	39,021
1-025B	58,612	58,609
Total	97,633	97,630

I. DESCRIPTION

The Snowcrest Mountain Roadless Area is located in the Gravelly Planning Unit on the Sheridan Ranger District. Major access is via the Ruby River road, which defines a major part of the eastern boundary of the roadless area. Other primitive roads provide some access on the west side of the area, but most of these roads end on private, State, or BLM lands.

The roadless area comprises all of the Snowcrest Mountain Range. These mountains lie from southwest to northeast, almost diagonally, through the west half of the Sheridan District portion of the Gravelly Planning Unit.

The lower elevation lands are broad, grassland benches and open, rolling grasslands. The area gradually slopes upward into steep ridges and terminates in the rugged, rocky peaks of the Snowcrest Range. The area is dissected by several major drainages that originate in the subalpine cirque basins. Many mass failure slump regions occur in the area.

Soils are variable and are derived from a wide variety of sedimentary rocks. Generally, clay loams and silty clays occur in the northwest corner (in area 1-025B). The Snowcrest Mountains are mainly quartzite and limestone; most of the rest of the area contains shales.

Lower elevations in the Snowcrest Mountain Roadless Area contain open sagebrush/grassland types, gradually turning into Douglas-fir stands with lodgepole pine intermixed. The timber areas are interrupted by wet meadows and large grassland parks. The upper elevations are covered by subalpine vegetation.

The roadless area is subdivided by the spine of mountain peaks into west (1-025A) and east (1-025B) halves. The topography of 1-025A is rough, steep, and more broken than that of the 1-025B area where gentle slopes and large, open grassland expanses are common. In area 1-025A mountain meadows and parks occur in the narrow canyons, and mountain ridges are sharp.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Ecological processes and the natural landscape in parts of the area have been disrupted to a certain extent by domestic grazing and vehicle travel. Most of the activity has occurred in the east side of the mountain range (1-025B) where terrain is less rugged. Here, range fences, water developments, and low standard roads with installed drainage improvements are evident. In particular, the Beaver Bench road to the west of the South Fork of the Ruby River divides this east side into north and south halves.

However, at a glance the area appears natural. The east side of the mountain range is representative of open spaces of foothills prairie lands. Climbing up into the mountains, human activity is negligible with the common wilderness ecosystems which are present.

Diverse habitats provide ecological niches for most native species of birds and mammals common to southwestern Montana.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for experiences often unique to wilderness, i.e., solitude, serenity, and self reliance, are available within this roadless area. The 20-mile trek along Snowcrest Trail offers an extensive travel through the mountainous region. The more rugged nature of the west side of the range (1-025A) offers opportunity to leave behind the rural agricultural lands and enter the forested, closed drainages of Indian, Rough, Meadow, and Lawrence Creeks. By contrast, the east side of the range offers a more open, grasslands environment.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities include hiking, camping, and rock climbing in the rugged peaks of the Snowcrest Range. The Snowcrest Trail which travels the ridgetops offers mountaineering opportunities. Fewer opportunities exist along the east side of the mountain range. Range developments and roads impact the area, and the more gentle topography and lack of vegetation are less conducive to primitive recreation experiences.

D. OTHER FEATURES

Fossils have been discovered in the Snowcrest Range, and opportunities for wildflower viewing are good.

E. MANAGEABILITY AND BOUNDARIES

The entire area, as well as each of the halves, (as presently delineated) is of sufficient size to be managed as wilderness. Regardless of whether the whole area or either of the halves was designated as wilderness, manageability and boundary definition would be a problem. Open grassland expanses encompass the lower elevations, and there are no sharp features, other than the spine of mountains in the interior of the area, on which boundaries could be effectively located. If a boundary was located to exclude the lower elevation grassland, there would be little choice other than to place it on a middle slope of the range, thus reducing the effective size of the areas. The exclusion of the Beaver Bench road as a corridor would cut area 1-025B almost in half, and exclusion of range developments and existing low standard roads and jeep trails would dramatically reduce the size and capability of area 1-025B.

1977 Inventory Acres:	99,800 gross	99,797 net
1983 Inventory Acres:	97,633	97,630
Change	- 2167	- 2167

Reasons for change in inventory acres:

Mineral Activity and roads	- 1864	- 1864
Acreage Recalculation	- 303	- 303

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-025A VALUE	1-025B VALUE	COMBINED VALUE
Acres				
Gross	Acres	39,021	58,612	97,633
Net	Acres	39,021	58,609	97,630
Recreation				
Primitive	RVD's	493	740	1233
SPNM	RVD's	718	1078	1796
SPM	RVD's	710	1067	1777
Range				
Existing obligated suitable	Acres	21,703	34,989	56,692
Allotments	# of	7	10	17
AUM's	AUM's	3920	13,526	17,446
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0
Timber				
Tentative suitable	Acres	11,140	13,363	24,503
Standing Volume	MBF	60,533	74,541	135,074
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	1686	1686
Big Game				
Winter Habitat	Acres	5568	15,812	21,380
Elk				
Winter Habitat	Acres	2497	7665	10,162
Deer				
Winter Habitat	Acres	979	3061	4040
Significant Fisheries				
Stream Miles	Miles	26.8	99.6	126.4
Stream Habitat	Acres	15.8	52.2	68.0
Lakes	# of	1	24	25
Lake Habitat	Acres	2	34	36
Water Developments				
Existing	# of	0	0	0

Resource Potentials, (continued)

Minerals				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	39,021	58,609	97,630
Low	Acres	0	0	0
Claims	# of	0	0	0
Oil and Gas Potential				
Very High	Acres	39,021	58,609	97,630
High	Acres	0	0	0
Moderate	Acres	0	0	0
Low	Acres	0	0	0
Oil and Gas Leases				
Leased area	Acres	37,421	56,689	94,110

1. Recreation

Area 1-025A has no developed recreation sites. Dispersed recreation use consists of hunting, fishing, and camping. The East Fork of Blacktail Deer Creek is a popular fishing stream. On the west and south slopes of the Snowcrest range, except for an area surrounding the Notch, motorized travel is infrequent, and that which occurs is highly restricted as specified in the Forest Travel Plan. The Notch road (#963) is closed to all motorized vehicles, except snowmobiles, from April 1 to July 1.

Area 1-025B has no developed recreation sites; however, motorized recreation opportunities are more frequent. Numerous jeep trails traverse the gentle topography of the grasslands, and all motorized vehicles, except snowmobiles, are restricted to designated routes yearlong. Snowmobiles are permitted to travel off designated routes from December 1 to May 15. Hunting and camping are the major uses.

2. Wildlife

Wildlife resources are similar in both halves of the Snowcrest Mountain roadless area. The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, mountain goat, and black bear. Upland game birds, such as spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame species utilize the area, especially furbearers and raptor species such as the golden eagle and ferruginous hawk. Streams provide habitat for cutthroat and eastern brook trout.

3. Water

Area 1-025A--the western slopes of the Snowcrest Range is the headwaters for the East Fork of Blacktail Deer Creek, and numerous smaller streams that flow to the west off the Forest boundary eventually emptying into the Beaverhead or Ruby Rivers.

Area 1-025B--the eastern slopes of the Snowcrest Range provide the headwaters for many small tributaries that empty directly into the Ruby River within the Forest boundary. Tributaries beginning in the southern slopes of the Snowcrest Mountains either feed the Blacktail Deer Creek to the west or flow into the Red Rock River to the south.

4. Livestock Operations

The majority of the Snowcrest Range is being grazed by permitted livestock. The land areas not grazed have been closed to benefit either wildlife or watershed resources.

Area 1-025A is under allotments except for a small area at Yellow Bear Lake. Because of the broken topography, fewer fences have been built on this side of the Snowcrest Range.

Area 1-025B has many fenced pastures on the east side of the Snowcrests. Water developments are common, and a pipeline to transport water has been constructed in this area. The Peterson Basin area is not in an allotment at this time.

5. Ecology

This roadless area has a diverse ecology. Much of the area is representative of grassland/sagebrush steppes. In forested zones Douglas-fir and alpine fir climax series are being maintained in seral lodgepole composition by naturally occurring fire.

6. Timber

For the most part, the timber conditions are similar in both halves of the Snowcrest roadless area. Lower elevation lands have some intermixed stands of Douglas-fir and lodgepole pine interspersed with grass and sagebrush. Except for some timber in the West Fork of the Ruby drainage, the forested area on the east side (1-025B) occurs in stringers and as patches on the Ruby River. The scattered nature of the timber complicates economic harvesting, but provides wildlife cover and soil erosion protection. Noncommercial whitebark pine and subalpine fir grow on some of the higher elevation sites.

7. Minerals/Oil and Gas

Area 1-025A - Geologic favorability for locatable minerals is moderate. Geologic favorability for oil and gas is very high. Oil and gas leasing and seismic exploration have occurred and are expected to continue.

Area 1-025B - Geologic favorability for locatable minerals is moderate. Geologic favorability for oil and gas is very high. Oil and gas leasing and seismic exploration have occurred and are expected to continue. Interest in oil and gas drilling in the southwestern part of 1-025B continues, although no drilling applications have been received. Oil and gas drilling is expected to occur just northwest of area 1-025B near Cottonwood Camp.

There are known phosphate (a leasable mineral) occurrences along the crest of the Snowcrest Mountain Range that are not reflected in the ratings for locatable minerals or oil and gas.

8. Cultural Resources
Indian artifacts have been discovered in the Snowcrest Range.

9. Land Use Authorizations
There are no land use authorizations.

10. Non-Federal Lands
There are 3 acres of private land in area 1-025B.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Most of the heavy fuels in the roadless area are found along the south and east side of the East Fork of Blacktail Deer Creek, the south and eastern slopes of the South Forks of the West Fork of Blacktail Deer Creek, Cream Creek and Ledford Creek. There have been about 25 wild fires in this area in the past 40 years; however burns have been limited to approximately 20 acres or less. Fire patterns on the western side of the mountain range indicate that fire spread has been primarily upslope and to the east, although fires would rarely spread over the barren crest of the mountain range. Prescribed fire is used to improve range conditions in the unit.

2. Insect and Disease - Spruce budworm infestation is endemic in the Douglas-fir stands in this area. There is moderate risk for mountain pine beetle infestation in lodgepole pine stands in Rough, Meadow, and Lawrence Creeks in the upper East Fork of Blacktail Deer Creek and in lodgepole pockets located in the West Fork of Ruby Creek south to Divide Creek. Once started, a bark beetle infestation would probably infect all lodgepole pine stands occurring between 7,800 and 8,200 feet in elevation in this area.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers
The nearest wilderness is the Lee Metcalf Wilderness which is moderately used and located within twenty-five miles. The area is more than 75 miles from any major communities 20,000 in population or larger.

2. Contribution to the Wilderness Preservation System
This area would contribute geological and ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
Most of the area in 1-025A was identified as roadless in RARE I. The remainder of the area, plus most of the acreage in 1-025B, was identified as essentially roadless. Neither area was selected as a wilderness study candidate through the RARE I process.

The 1977 Draft EIS and Proposed Forest Plan for the Beaverhead allocated the roadless area primarily to range, wildlife, and recreation uses that would create few impacts on the roadless nature of the area. Low intensity timber harvest was also proposed on some areas. Public comment on the Draft indicated a concern for wildlife, and these concerns were considered, to the extent possible, in the final designations in the 1978 Land Management Plan.

In 1977 the Snowcrest area was again identified as roadless. The wilderness potential of the area was evaluated through the Forest planning process that was taking place concurrently with RARE II. As a result of the analysis done and decisions made in the Forest planning process, the Snowcrest area was dropped from further study in RARE II when it was allocated to nonwilderness uses in the 1978 Forest Plan.

In 1983 the Snowcrest area was again inventoried as roadless in the current planning process. Public interest has been expressed for retaining the Snowcrest area, particularly the portion in the East Fork of Blacktail Deer Creek, in roadless status. There has not been a great deal of interest in having the area designated as wilderness.

In public comments on the 1985 Revised Draft EIS and Proposed Plan Supplement there was support expressed for wilderness and roadless management of the Snowcrest Roadless Area. The Wilderness Society and those who wrote in support of the Society's position, proposed the Snowcest for "more sensitive management." Essentially, they divided the roadless area into two parts, Snowcrest I and II, and emphasized primitive, nonmotorized recreation with no new road construction in Snowcrest I and "an appropriate mix of primitive and semi-primitive recreation with no new roads except minimal roading that is absolutely necessary to the enjoyment of a mineral lease or permit" in Snowcrest II. Others also supported maintaining the roadless nature of the Snowcrest area. A postcard campaign drawing approximately 200 participants and some individual commentors supported wilderness designation for the Snowcrest area. In addition, the Greater Yellowstone Coalition has identified the Snowcrest Roadless Area as part of the Greater Yellowstone Ecosystem and supports wilderness designation for the area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Snowcrest Mountain Roadless Area (1-025A&B)

Management Emphases		Alternative (Net Acres)									
		A	B	C	D	F	G	H*	I	W	S**
Group 1: 1/	1-025A	0	0	39,021	39,021	39,021	0	0	39,021	0	0
	1-025B	0	0	58,609	58,609	58,609	0	0	58,609	0	0
Group 2: 2/	1-025A	8585	3902	0	0	0	1951	0	0	3902	0
	1-025B	7619	8791	0	0	0	5861	586	0	8791	0
Group 3: 3/	1-025A	0	3902	0	0	0	3902	0	0	195	0
	1-025B	0	11,722	0	0	0	14,652	0	0	293	0
Group 4: 4/	1-025A	30,436	23,413	0	0	0	27,315	23,413	0	25,364	38,101
	1-025B	50,990	5861	0	0	0	19,341	11,722	0	29,305	25,039
Group 5: 5/	1-025A	0	7804	0	0	0	5853	15,608	0	9560	920
	1-025B	0	32,235	0	0	0	18,755	46,301	0	20,220	33,570
TOTAL:		97,630	97,630	97,630	97,630	97,630	97,630	97,630	97,630	97,630	97,630

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres)									
	A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	30,454	19,743	0	0	0	9862	5106	0	23,783	0
Roadless:										
Decade 1	97,630	97,630	0	0	0	97,630	97,630	0	97,630	97,630
Decade 5 *	67,176	77,887	0	0	0	87,768	92,524	0	73,847	97,630
Wilderness:	0	0	97,630	97,630	97,630	0	0	97,630	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Snowcrest Mountain Roadless Area (1-025A&B) is designated as wilderness in Alternatives C, D, F, and I.

Wilderness can enhance the areas' wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing Beaver Creek road and other low standard roads, which are used for hunting and for range management and other motorized activities associated with fence and water development maintenance, could be eliminated. The primitive recreation opportunities including hiking, camping, and rock climbing in the rugged peaks of the Snowcrest Range are maintained.

The 24,503 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 135 MMBF in standing volume. Lower elevation lands have some intermixed stands of Douglas-fir and lodgepole pine interspersed with grass and sagebrush. Except for some timber in the West Fork of the Ruby drainage, the scattered nature of the timber complicates economic harvesting.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base.

Current livestock grazing, 17,446 AUM's, could continue, but management practices would change to require nonmechanical methods.

The forage and cover for big game species such as elk, mule deer, moose, mountain lion, mountain goat, and black bear would be maintained in the present favorable conditions since much of the forage produced on winter range is permanent grassland and cover would not be altered.

Other nonpriced resource values are affected as follows:

Visual quality would be preserved.
The National Wilderness Preservation System would increase.
Existing elk security would be maintained.
Water quality and fisheries would be maintained at their present natural levels.
Local employment would probably remain unchanged; demand for outfitter-guide services for hunting could increase.

Economic and social effects are related to the resource values of wildlife, recreation, wilderness, timber, and minerals. Since timber harvest is precluded, the associated wood products industries would not be supported. Wilderness, however, could benefit the service sector such as outfitter and guides and resort businesses. Publics valuing wilderness would be supported. Hunting and camping, the major recreation uses could continue although vehicle access would not be allowed. Likewise, grazing operations could continue although costs, in time and money, could be incurred in changes to nonmechanical methods. Snowmobile use and other motorized recreation, primarily on the east side, would be discontinued forcing users to other areas.

Under a wilderness designation, these areas would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Both 1-025A and 1-025B have very high geologic favorability for oil and gas, but a moderate geologic favorability for most locatable minerals.

Current information indicates no mining claims exist within these areas. No impact on wilderness character from the exercise of valid existing rights is anticipated.

As of December, 1983, there were approximately 94,110 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the areas. It is very likely that existing rights will be exercised by oil and gas lessees or assignees in these areas. There is interest in drilling both in and near these areas. Once leases expire without discovery, the area will be withdrawn from mineral entry.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Between 8 and 17 percent of the Snowcrest Roadless Area (1-025A&B) is assigned these prescriptions in Alternatives A, B, G and W. Alternative H assigns less than one percent of the area to these prescriptions.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand. Since most of the harvest in this area would occur in the drainages and at midslope, the roadless area would be segmented into the grassland areas at lower elevations and the mountainous, rugged portions in the higher elevations.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the areas.

Range resources would benefit slightly by the creation of transitory range which may become available for grazing. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be modified and man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the timber management areas.
>
> The opportunities for primitive and semi-primitive recreation will be severely reduced or eliminated under these prescriptions.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> Timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow some of the timber-range ecotone to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries. The change in recreation setting could be disruptive to those publics using the areas for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in these areas could be adversely affected by the change hunting quality, i.e., loss of cover for big game. Publics valuing wilderness would not be supported by this management emphasis.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. Both 1-025A and 1-025B have very high geologic favorability for oil and gas.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Between 16 and 19 percent of these emphases are assigned to the Snowcrest Roadless Area (1-025A and 1-025B) in Alternatives B and G respectively. Less than one percent of the area is included in these emphases in Alternative W.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in these areas. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be some increased opportunities for intensive range management under these prescriptions. Wwater developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow. Important wildflower viewing areas along the Gravelly Range would be adversely impacted.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.

Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive
Recreation/Custodial

Portions of the Snowcrest Roadless Area (1-025A and 1-025B) are assigned these prescriptions in Alternatives B, G, H, W and S; from 30 percent in Alternative B to 65 percent in Alternative S (the Proposed Action). Alternative A assigns 83 percent of this area to these prescriptions. The Snowcrest Recreation Area is included in this grouping in Alternative S.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/ roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline. Since much of the area applied to these prescriptions is in the higher elevations of the Snowcrest Range, roads crossing through the area are less likely than access intruding or skirting the portions in this emphasis.

Range activities would continue at present levels and would not be significantly affected.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Wildlife habitat will be maintained.
>
> Water quality and fisheries would not be affected by management activities.

Since these management emphases maintain the areas much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the areas would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. Both 1-025A and 1-025B have very high geologic favorability for oil and gas. It is very unlikely that existing rights will be exercised by oil and gas lessees or assigness in these areas. There is interest in drilling both in and near these areas.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range/Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Snowcrest Mountain Roadless Area (1-025A&B) are assigned these prescriptions in Alternatives B, G, H, W and S; from 25 percent in Alternative G to 63 percent in Alternative H.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the areas. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area. Nonstructural range improvements will impact the naturalness of the areas.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

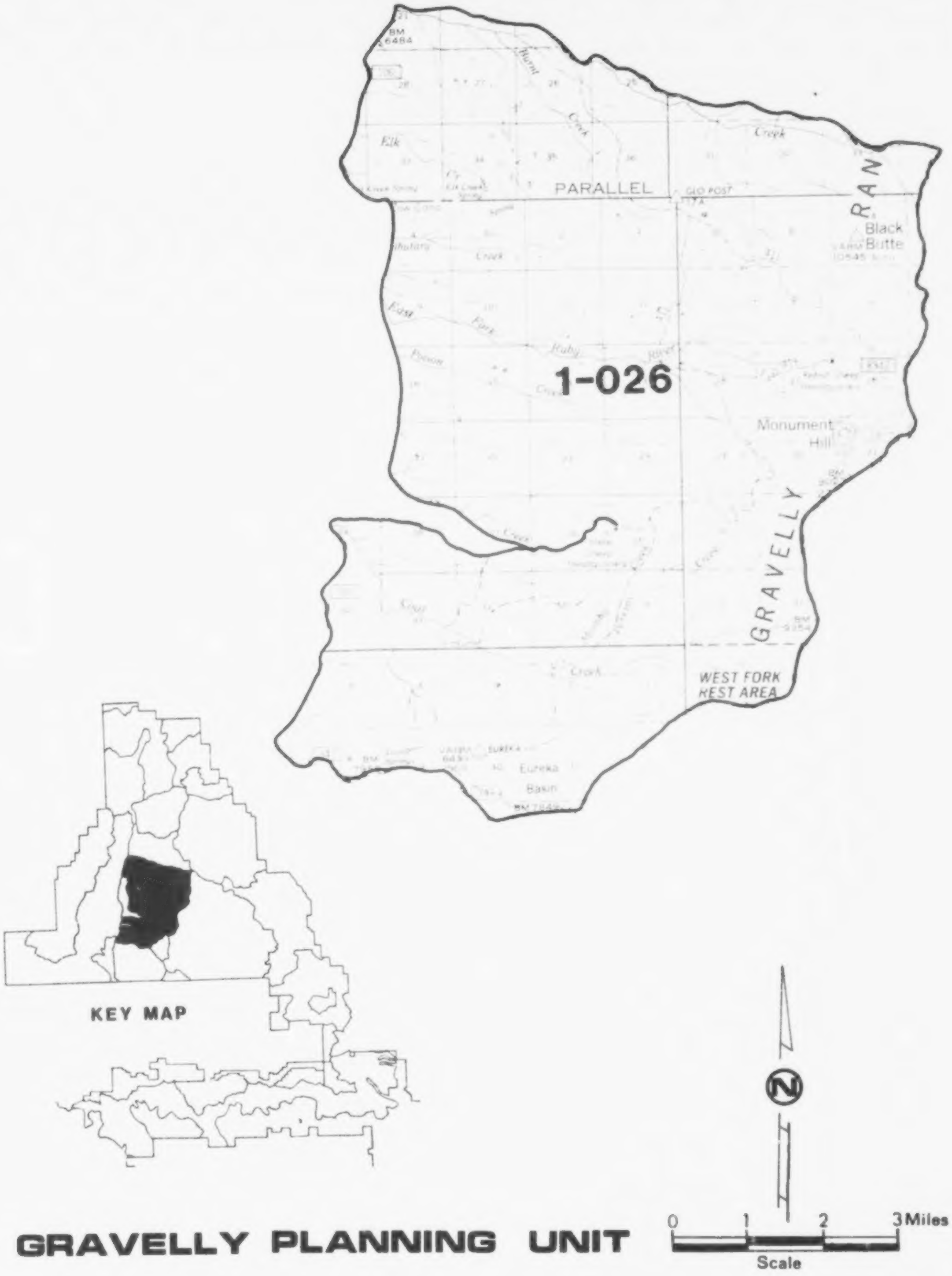
> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat in portions of the West Fork Blacktail Creek.

Since these management emphases maintain the areas much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Both 1-025A and 1-025B have very high geologic favorability for oil and gas.

ROADLESS AREA 1-026

BLACK BUTTE


BM 6484
Burnt Creek
Elk
Creek
PARALLEL
GEO POST
RAN
Black Butte
10545
East Fork
Ruby River
Poison
1-026
Monument Hill
GRAVELLY
Creek
WEST FORK REST AREA
Eureka Basin
KEY MAP
N
0
1
2
3 Miles
Scale

GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

	Gross Acres	Net Acres
Roadless Area Name: 1-026 Black Butte	39,787	39,787

I. DESCRIPTION

The Black Butte Roadless Area is located in the Sheridan Ranger District in Madison County. It lies on the east slopes of the Gravelly Range in the Gravelly Planning Unit. Access to the perimeter is obtained from the Ruby River and Gravelly Range roads. It is defined on the east by Ruby River and the main divide of the Gravelly Range and on the south by the Eureka Basin road. Starting from the west, the area contains broad benches sloping upward into broken ridges and a high subalpine ridge. It is drained by several major tributaries to the Ruby River. It contains many mass failure slumps due to soils and geology of the Gravellies. Elevations vary from 6,450 to 10,546 feet at Black Butte.

Soils are derived from a variety of sedimentary rocks. Generally, shales and sandstones dominate the area. Shallow silt loams occur along the top of the Gravelly Range.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The area is large, but can be viewed from adjacent lands. From within, the view is basically unobstructed for miles to the south, west and north. At lower elevation grasslands, the view in all directions is over a mile.

Man has influenced the area by grazing since the 1880's. One hundred years of livestock grazing and resulting developments for management has intruded upon the natural integrity of the land. However, the overall appearance of the area has not changed significantly. The major alterations are fences and water developments constructed for the management of domestic livestock and the roads that provide the boundaries of the area.

B. OPPORTUNITIES FOR SOLITUDE

The area is large enough to provide an individual with solitude. Because of the terrain and vegetation, one can experience a great sense of expansiveness and lack of confinement. Topographic relief provides additional solitude opportunities, although much of this area contains large expanses of sagebrush/grassland and is easily traveled.

C. PRIMITIVE RECREATION OPPORTUNITIES

There are only limited challenges and primitive recreation opportunities offered to anyone seeking outdoor adventure. This area can be hiked or ridden through in less than a day. Terrain is only moderate and wildlife species that inhabit the region present no threats.

D. OTHER FEATURES

There are no special topographical, geographical or cultural features in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

This area is basically bounded by open grassland country. The boundaries of designated wilderness would be hard to define, and it would be difficult to prevent intrusion from motorized vehicle travel within the area.

1977 Inventory Acres:	38,600 gross	38,600 net
1983 Inventory Acres:	39,787	39,787
Change	+ 1187	+ 1187

Change in inventoried acres is due to acre recalculation done in the Forest Planning Process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

BLACK BUTTE ROADLESS AREA
Area Descriptor: 1-026

CATEGORY	UNIT	VALUE
Gross Acres	acres	39,787
Net Acres	acres	39,787
Recreation		
Primitive	RVD'S	502
SPNM	RVD'S	732
SPM	RVD'S	724
Range		
Existing obligated suitable	Acres	32,506
Allotments	# of	9
AUM'S	AUM'S	11,148
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	7894
Standing Volume	MBF	42,302
Corridors		
Existing and Potential	# of	0

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	77
Significant Fisheries		
Stream miles	Miles	41.2
Stream Habitat	Acres	11.8
Lakes	# of	37
Lakes-Habitat	Acres	70
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	0
High	Acres	15,915
Moderate	Acres	23,872
Low	Acres	0
Claims	# of	17
Oil and Gas Favorability		
Very High	Acres	6787
High	Acres	33,000
Moderate	Acres	0
Low	Acres	0

Resource Potentials, continued

Wildlife T & E Bald Eagle	Acres	0	Oil and Gas Leases Leased area	Acres	39,787
Big Game Winter Habitat	Acres	2986			
Elk Winter Habitat	Acres	127			

1. Recreation
   Major recreational opportunities are big game hunting and late winter snowmobiling on the east side. The opportunities for other types of recreation are few.

2. Wildlife
   The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, and black bear. Upland game birds, such as spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of non-game wildlife species utilize the area, especially furbearers and raptor species such as the golden eagle and ferruginous hawk.

3. Water
   This area is an important watershed. The East Fork of the Ruby River and Coal, Basin, Poison and Burnt Creeks originate near the eastern boundary of the area near the crest of the Gravelly Range and flow westward to the Ruby River on the western boundary of the roadless area.

4. Livestock Operations
   Domestic livestock, both cattle and sheep, are permitted under intensive range management systems.

5. Ecology
   The lower terrain is a grassland/sagebrush cover, with pockets of aspen and open growth Douglas-fir on the north slopes. At middle elevation, the area is a mixture of Douglas-fir, lodgepole pine, and wet meadow grassland. The upper elevation eases from whitebark pine into open subalpine grasslands.

6. Timber
   There are no commercial timber sales in the area, and past timber activity has been minor.

7. Minerals/Oil and Gas
   Geologic favorability for locatable minerals is moderate (60%) to high (40%). Gypsum claims currently undergoing exploration extend into the northeastern part of the area. Placer gold exploration and small scale

production has occurred in the southern part of the area. Geologic favorability for oil and gas is high to very high. Oil and gas leasing and geophysical exploration have occurred and are expected to continue.

8. Cultural Resources
The area was traveled and used by native Americans. Evidence of these activities is assumed to exist throughout the Gravelly Range.

9. Land Use Authorizations
There are no land use authorizations in the roadless area.

10. Non-Federal Lands
The area contains no private land.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire activity is minor in this area. Major activities will be future vegetative manipulation projects through the use of fire.

2. Insect and Disease
No known impacts from insects and disease are present.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
There are no adjacent wildernesses. The closest is the Lee Metcalf Wilderness, which is located within 20 miles. The Anaconda-Pintler Wilderness is over 100 miles away.

The Black Butte area is located 60 miles south of Dillon, 90 miles south of Butte, and 90 miles southwest of Bozeman, Montana.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
Most of area 1-026 was identified in RARE I as essentially roadless. However, the area was not selected as a wilderness study area candidate through that process.

The Black Butte area was inventoried as roadless in the 1977 RARE II process. The wilderness potential of the roadless area was evaluated in the Forest planning process being conducted concurrently on the Forest with RARE II. The 1978 Forest Land Management Plan and Final EIS allocated lands within this roadless area for resource uses other than wilderness. Consequently, the Black Butte roadless area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decision made for this roadless area did not appear to be controversial to Forest publics.

The Black Butte area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range of this area. Opponents wrote that the area had "no special qualities," was roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

The Black Butte area was a study area in the Elk-Logging Study and has subsequently received considerable public review. The major public interest has been for retaining this area as an intensive forage-producing area for domestic livestock and wildlife. Other concerns have been expressed for retaining the area as it is presently managed and closed to motorized travel. The public supports these ORV restrictions.

The Black Butte Roadless Area was seldom addressed in public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement. The Greater Yellowstone Coalition did identify this roadless area as part of the Greater Yellowstone Ecosystem and supported wilderness designaion of this area and other roadless areas in the Gravelly Range.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Black Butte Roadless Area (1-026)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	39,787	0	0	0	0	39,787	0	0
Group 2: (Timber)	490	490	0	0	398	398	0	0	398	0
Group 3: (High Range, High Range with Low Intensity Wildlife No Timber)	0	11,936	0	0	5968	27,453	1989	0	1194	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	37,308	1897	0	30,636	19,894	1989	1989	0	19,893	1771
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	1989	25,464	0	9151	13,527	9947	35,809	0	18,[illegible]02	38,016
TOTAL:	39,787	39,787	39,787	39,787	39,787	39,787	39,787	39,787	39,787	39,787

*Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
**Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	490	490	0	0	398	398	0	0	398	0
Roadless:										
Decade 1	39,787	39,787	0	39,787	39,787	39,787	39,787	0	39,787	39,787
Decade 5 *	39,297	39,297	0	39,787	39,389	39,389	39,787	0	39,389	39,787
Wilderness:	0	0	39,787	0	0	0	0	39,787	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The entire Black Butte Roadless Area (1-026) is designated as wilderness in Alternatives C and I. No other alternatives designate any portion of this area to a wilderness emphasis.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time. Present snowmobile use would be curtailed.

Area 1-026 receives moderate snowmobile use which would be eliminated especially around the perimeter of the area, penetrating into it from existing roads. There are no trails designated but several penetrate from roads of the western border.

The 7894 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 42.3 MMBF in standing volume. Loss in timber volume would not be affected by a wilderness designation since only a portion of the 39,787 acres contain timber.

Current livestock grazing, 11,148 AUM's, could continue on the portions of the 9 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained for deer, elk, and moose. Elk calving areas present summer range security cover but there is no significant amount of winter range due to heavy snow cover.

Other nonpriced resource values are affected as follows:

> Wilderness designation would increase the land base in the Wilderness Preservation System and provide ecological diversity by introducing sagel grasslands ecoysystems into the Wilderness System.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of range, minerals, wildlife, recreation, and wilderness qualities. Wilderness designation would affect a sheep operation up the Basin Creek drainage. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. The geologic favorability is very high for oil and gas for over 6,700 acres.

Exercise of valid existing rights on 17 mining claims will be restricted. As of December, 1983, there were approximately 39,787 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Less than one percent of the Black Butte Roadless Area (1-026) is assigned to these emphases in Alternatives A, B, F, G and W.

Timber harvest would not affect this area. The only significant stands occur along the East Fork of the Ruby River and are not visible from road access points. If timber harvest did occur, attendant roads would be necessary since units occur centrally within the area.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater.

Range resources would benefit some by the creation of transitory range which may become available for grazing. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> The opportunities for primitive and semiprimitive recreation opportunities would generally be unaffected.

Social and economic effects center around the resource values of wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available on the few acres assigned these emphases, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. The geologic favorability is very high for oil and gas for over 6,700 acres.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions ofthe Black Butte Roadless Area (1-026) are assigned to these emphases in alternatives B, F, G, H, and W; from only 3 percent in Alternative W to 69 percent in Alternative G.

Under these prescriptions, motorized use will probably increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities may be affected under some of these prescriptions.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Portions of the Black Butte Roadless Area (1-026) are allocated to these emphases in all Alternatives except C and I; from 4 percent in Alternative S (the Proposed Action) to 94 percent in Alternative A.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/ roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained.

Water quality and fisheries would not be affected by management activities.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. The geologic favorability is very high for oil and gas for over 6700 acres.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Black Butte Roadless Area (1-026) are allocated to these emphases in all Alternatives except C and I; from 5 percent in Alternative A to 96 percent in Alternative S (the Proposed Action).

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. The geologic favorability for oil and gas for over 6,700 acres is very high.

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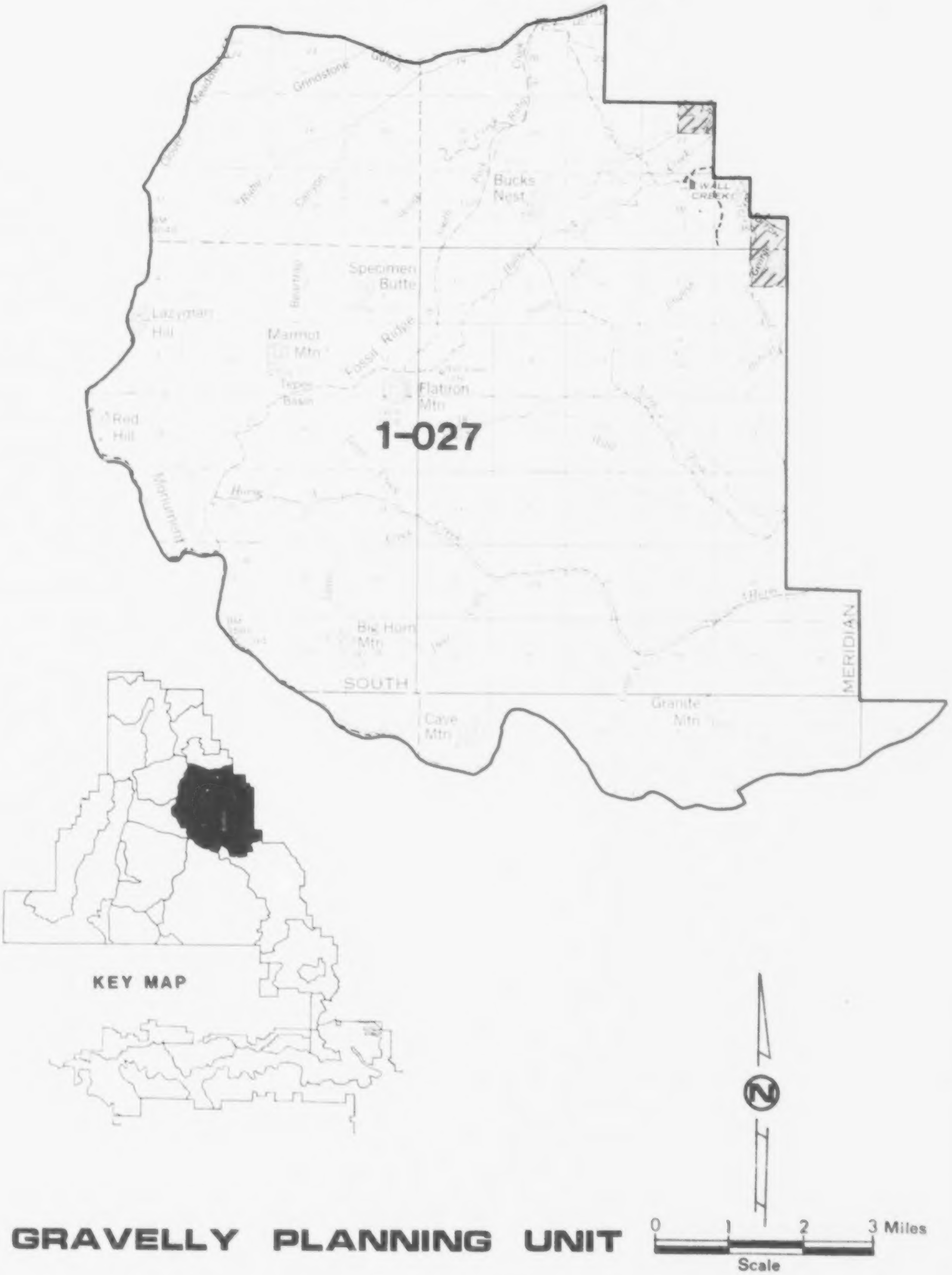
ROADLESS AREA 1-027

BIG HORN MOUNTAIN


Meadow
Gold
Grindstone
Gulch
Canyon
Bucks Nest
WALL CREEK
Specimen Butte
Lazyman Hill
Marmot Mtn
Fossil Ridge
Teepee Basin
Flatiron Mtn
1-027
Red Hill
Monument
Horn
Big Horn Mtn
SOUTH
MERIDIAN
Cave Mtn
Granite Mtn
KEY MAP
N
0
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GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-027 Big Horn Mountain	Gross Acres	Net Acres
	50,870	50,390

I. DESCRIPTION

The Big Horn Mountain Roadless Area is centrally located on the east slope of the Gravelly Range. Access is from roads at Wall Creek Station, the Gravelly Range road, and the Standard Creek road. Additional access is provided from the Ruby Creek and Broomtail Ridge roads.

The geographic location extends from Ruby Creek on the north to Standard Creek on the south; the Forest boundary on the east to the Gravelly Range crest on the west. The area is deeply dissected by Ruby Creek and Horse Creek.

The southern half contains rocky canyons, gently undulating basins and broad, gently to moderately steep benches and slopes; a few basins and large rumply landslides also occur here. North of Horse Creek, a steep slope face drops abruptly from the Wall Creek bench to the terraces of the Madison Valley. This is the most rugged part of the Gravelly Range with high peaks, cliffs, deep canyons and some benchlands. Elevations vary from 6,000 to over 10,200 feet on Big Horn Mountain.

The predominant cover type is lodgepole pine and Douglas-fir timber. There are alpine grasslands at the higher elevations and many parks throughout the area. Rough fescue is found on Cave Mountain and on the Wall Creek bench. This is the southern periphery for this species.

Soils vary considerably. In the upper northeast, soils are shallow, rocky loams and silt loams derived from limestone, similar to the shallow silt loams and loams derived from limestone and associated sedimentaries in the southwest portion. The numerous basins contain deep silt loams. In the southeast, deep, fine sandy loams with clay loam subsoils are common on the sloping benches. These soils are derived from welded tuffs, rhyolites and associated volcanic rocks. Finally, the northwest area contains moderately deep loams, clay loams and silty clays derived from a variety of sedimentary rocks, chiefly shales and sandstones.

Cave Mountain is a unique and relatively undisturbed example of an alpine grassland. It is being considered for a Natural Area. The area is geologically unusual and visited by spelunkers and geology students each year.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Most of the area has a natural appearance. The division fences on the Wall Creek allotment are a visual detraction in a local area.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude and primitive recreation are available because of the relatively large size of the area and the rugged terrain. One can experience a great sense of expansiveness and lack of confinement. This roadless area also offers challenging experiences in its more rugged regions.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunities for solitude and primitive recreation are available because of the relatively large size of the area and the rugged terrain. This roadless area also offers challenging experiences in its more rugged regions such as hunting, hiking, backpacking, spelunking, rock climbing, ski touring, and orienteering. The area offers excellent opportunities for backcountry horse trips and camping.

D. OTHER FEATURES

Cave Mountain is being considered for a Natural Area and contains a number of caves.

Rough fescue is rare to this area, but grows on Cave Mountain and on some locations on the Wall Creek bench. This is the southern limit for this grass species.

E. MANAGEABILITY AND BOUNDARIES

This area is of sufficient size to make this a viable wilderness area. The boundaries are well defined. Minor changes in the boundary would remove some conflicting uses, such as the Wall Creek Administrative site and the Granite Mountain Timber Sale. Other boundary deletions would exclude U.S. Steel's patented iron claims and a small portion of the Wall Creek allotment next to the State's winter game range. These boundary changes would make the area a more desirable wilderness and still be of adequate size.

1977 Inventory Acres:	51,300 gross	50,820 net
1983 Inventory Acres:	50,870	50,390
Change	- 430	- 430

Reasons for change in inventory acres:

F.Y. 1983 road Construction and Timber Sale	- 1248	- 1248
Acreage Recalculation	+ 818	+ 818

III. AVAILABILITY

A. RESOURCE POTENTIALS

BIG HORN MOUNTAIN ROADLESS AREA
Area Descriptor: 1-027

CATEGORY	UNIT	VALUE
Gross Acres	acres	50,870
Net Acres	acres	50,390
Recreation		
Primitive	RVD'S	636
SPNM	RVD'S	927
SPM	RVD'S	917
Range		
Existing obligated suitable	Acres	17,085
Allotments	# of	7
AUM'S	AUM'S	4388
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	18,267
Standing Volume	MBF	95,591
Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	22,653
Elk		
Winter Habitat	Acres	8240

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	6952
Significant Fisheries		
Stream miles	Miles	48.3
Stream Habitat	Acres	16.5
Lakes	# of	8
Lakes-Habitat	Acres	14
Water Developments		
Existing	# of	0
Minerals Favorability		
Very High	Acres	4480
High	Acres	20,715
Moderate	Acres	25,195
Low	Acres	0
Claims	# of	46
Oil and Gas Favorability		
Very High	Acres	0
High	Acres	30,234
Moderate	Acres	20,156
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	32,170

1. Recreation

The Big Horn Mountain Roadless Area is easily accessible, large, and provides a popular area for hunters, campers and sightseers. This area is heavily used for fall hunting, but summer recreation use is light. A larger potential than existing use is available fo backpacking, spelunking, rock climbing, ski touring and orienteering.

2. Wildlife

It contains the Forest's portion of the Wall Creek Winter Game Range. Deer and elk winter here and on the adjacent State and private lands. There are important elk calving and nursery areas throughout. The security cover in Horse Creek and Ruby Creek is some of the finest in the Gravelly Range. It is essential to maintaining trophy size bull elk in this region.

The area has habitat potential for the introduction of Rocky Mountain goats and possibly bighorn sheep. It contains a significant amount of range not grazed by domestic livestock. Grizzly bear sightings have occurred in the area over the years. They are believed to be transient bears and no resident population is known to exist. Riparian zones in the area provide moose with critical winter range.

Upland game birds, such as spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variety of nongame wildlife species utilize the area, especially furbearers and raptor species.

Ruby Creek, Wall Creek, and Horse Creek all support resident fisheries. Fishing opportunities all occur in the lower reaches close to the National Forest boundary. Rainbow trout comprise the most catchable populations of fish. Native cutthroats are found mainly in the headwaters but seldom grow to catchable size. These streams all provide important spawning habitat.

3. Water

This region includes several important tributaries to the Madison River. The watershed value is high; Ruby Creek carries a high sediment runoff in spring.

4. Livestock Operations

Parts of four cattle and three sheep allotments are contained in the Big Horn Mountain area. Some of the Wall Creek allotment has been extensively developed for grazing and is suitable for intensive management. Most of the area is too rugged for intensive management. There are numerous fences and water developments for the management of domestic livestock.

5. Ecology

The predominant cover type is lodgepole pine and Douglas-fir timber. There are alpine grasslands at the higher elevations and many parks throughout the area. Rough fescue is found on Cave Mountain. This is the southern periphery for this species.

6. Timber

Some timber harvesting has occurred here and recent harvesting activity has resulted from the mountain pine beetle infestation.

7. Minerals/Oil and Gas

Phosphate occurrences are located along the crest of the Gravelly Range. U.S. Steel has recently patented iron claims south and east of Cave Mountain. There is a gold placer mine claim group in the bottom of Ruby Creek. Geologic favorability for locatable minerals is high to very high (50%) and moderate (50%). Geologic favorability for oil and gas is high (60%) to moderate (40%). Oil and gas leasing and geophysical exploration have occurred and are expected to continue.

8. Cultural Resources

Artifacts and an Indian camp have been discovered in the roadless area.

9. Land Use Authorizations

There are no special land authorizations in the area.

10. Non-Federal Lands

There are 480 acres of private ground contained in this area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Big Horn Mountain has a low incidence of fire.

2. Insect and Disease

The mountain pine beetle and spruce budworm are in epidemic stages in this area. Without some timber harvesting, the probability of fire activity will increase.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The Lee Metcalf Wilderness is within twenty miles of 1-027; the Anaconda-Pintler Wilderness is about 100 miles away. Use in those areas is low to moderate. Population centers are not close: Bozeman is 70 miles away; Butte, 100 miles; and Billings is 300 miles to the east.

2. Contribution to Wilderness Preservation System

This area would contribute geological and ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest

Approximately one-half of the land in area 1-027 was identified in RARE I as roadless area #55, Big Horn Mountain. The remaining half was identified as essentially roadless. However, the area was not selected as a wilderness study area candidate through that process.

The Big Horn Mountain area was inventoried as roadless in the 1977 RARE II process. The wilderness potential of the roadless area was evaluated in the Forest planning process being conducted on the Forest concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS allocated lands within this roadless area for resource uses other than wilderness. Consequently, the Big Horn Mountain roadless area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decision made for this roadless area did not appear to be controversial to Forest publics.

The Big Horn Mountain area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range of this area. Opponents wrote that the area had "no special qualities," was roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was concern expressed that the roadless areas in the Gravelly Range remain roadless. There was little support expressed for wilderness designation of these areas. The Greater Yellowstone Coalition has identified this area as part of the Greater Yellowstone Ecosystem and has expressed interest in wilderness designation for this and other roadless areas in the Gravelly Range.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Big Horn Mountain Roadless Area (1-027)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	50,390	50,390	0	0	0	50,390	0	0
Group 2: (Timber)	8567	5039	0	0	11,590	10,078	5039	0	12,597	5999
Group 3: (High Range, High Range with Low Intensity Wildlife No Timber)	0	2520	0	0	6047	7559	2520	0	2520	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	41,823	35,272	0	0	26,202	25,194	27,714	0	20,156	24,273
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	7559	0	0	6551	7559	15,117	0	15,117	20,118
TOTAL:	50,390	50,390	50,390	50,390	50,390	50,390	50,390	50,390	50,390	50,390

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	9653	18,267	0	0	12,029	18,267	400	0	6445	400
Decade 5 *	12,297	18,267	0	0	23,240	18,267	5449	0	17,847	5449
Roadless:										
Decade 1	40,737	32,123	0	0	38,361	32,123	49,990	0	43,945	49,990
Decade 5 *	38,093	32,123	0	0	27,150	32,123	44,941	0	32,543	44,941
Wilderness:	0	0	50,390	50,390	0	0	0	50,390	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Big Horn Mountain Roadless Area (1-027) is designated as wilderness in Alternatives C, D, and I.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 18,267 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 95.6 MMBF in standing volume. The largest concentrated areas of land suitable for timber production is in the Ruby Creek drainage.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 4388 AUM's, could continue on the portions of the 7 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained except for encroachment of timber into some of these areas. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

Visual quality would be retained and, over time, improved. Wilderness designation would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.

Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate. Elimination of existing motorized trail access to the Wall Creek bench area would provide greater security for elk and deer.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be eliminated under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and new mineral development, the related industries would not be supported by this emphasis. Timber supply Forest-wide would drop, resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, most everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Approximately 4500 acres have very high geologic favorability (for iron deposits in Archean rocks).

Exercise of valid existing rights on 46 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 32,170 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Big Horn Mountain Roadless Area (1-027) are assigned these prescriptions in all Alternatives except C, D and I; from 10 percent in Alternatives B and H to 25 percent in Alternative W. The largest areas allocated to timber management are in the lower half of the Ruby Creek drainage.

Intensive timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visable from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities. Retention/partial retention would be applied primarily to the areas visible from Highway 287 in the Madison Valley.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional fencing to maintain intensive management

systems. Range activities, however, would not significantly affect the wilderness potential.
The nature of recreation experiences would be changed with opportunities for primitive and semi-primitive recreation including opportunities to hunt in an unroaded environment being severely reduced.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area. No alternative proposes extensive timber harvesting within the elk winter range in the Wall Creek area.
>
> Water quality and fisheries would be adversely affected but effects would be partially mitigated in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. The primary area where this VQO will be applied is the area seen from Highway 287 in the Madison Valley. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area would be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

Approximately 4500 acres have very high geologic favorability (for iron deposits in Archean rocks).

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Big Horn Mountain Roadless Area (1-027) are assigned these prescriptions in Alternatives B, F, G, H and W; from 5 percent in Alternatives B, H and W to 15 percent in Alternative G.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will probably be minor.

Water quality and fisheries could be adversely affected, but effects would be partially mitigated in accordance with the Forest standards and guidelines.

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Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Large portions of the Big Horn Mountain Roadless Area (1-027) are assigned these prescriptions in all Alternatives except C, D and I; from 40 percent in Alternative W to 83 percent in Alternative A.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. Approximately 4500 acres have very high geologic favorability (for iron deposits in Archean rocks).

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Big Horn Mountain Roadless Area (1-027) are assigned these prescriptions in all Alternatives except A, C, D and I; from 13 percent in Alternative F to 40 percent in Alternative S (the Proposed Action).

The effects of implementing these prescriptions could be expected to be similar to those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescriptions, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase, but probably to a very limited degree.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semiprimitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semiprimitive recreation activities will be adversely affected.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate. Elk habitat quality will be maintained or increased. Recreation visitor days associated would probably increase.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

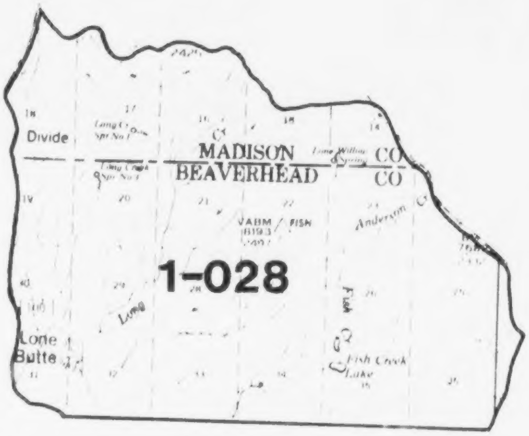
Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Approximately 4500 acres have very high geologic favorability (for iron deposits in Archean rocks).

ROADLESS AREA 1-028

LONE BUTTE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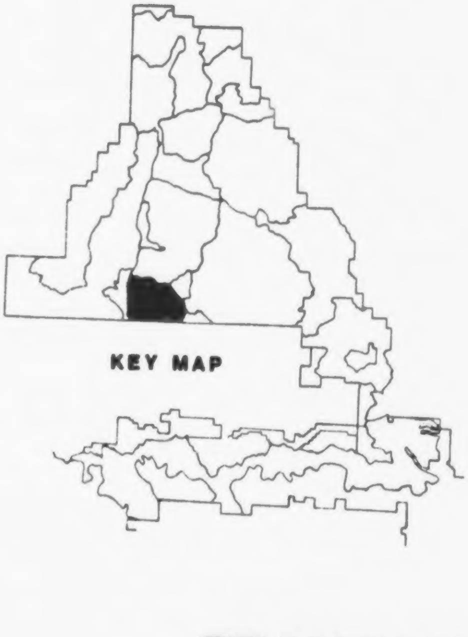
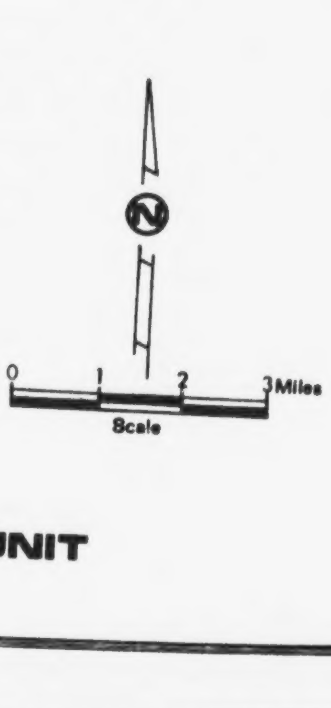
BEAVERHEAD CO
Long Creek Spr No 1
Lone Willow Spring
Anderson Cr
VABM 8193
Fish Cr
1-028
Lone Butte
Fish Creek Lake

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GRAVELLY PLANNING UNIT

Roadless Area Name: 1-028 Lone Butte	Gross Acres	Net Acres
	14,138	14,138

I. DESCRIPTION

The Lone Butte Roadless Area is located in the Centennial Valley portion of the Gravelly Planning Unit, Sheridan and Madison Ranger Districts. It is on the south National Forest boundary of the Gravelly Range, approximately 60 miles east of Dillon, Montana. Access can be gained from the Ruby-Centennial and Gravelly Range roads. An adequate trail system serves the area, also.

The overall aspect of the terrain is one of broken-rolling grasslands dissected by numerous perennial streams. Rolling foothills with long, moderate to moderately steep slopes occur along the West Fork Madison River which borders the northeast edge of the area. Broad, gently sloping basins and ridgetops occur along the crest of the Gravelly Range.

Deep, dark-colored loams and clay loams occur on the foothills along the West Fork. The soil of the area will slump when wet.

Vegetation is primarily native grasses with a sagebrush overstory. There are some pockets of aspen and Douglas-fir, but the majority of the region appears as rolling grassland similar to the agricultural lands of eastern Montana. Adjacent lands to the south are similar and to the north, the land slopes upward into the high country of the Gravelly Range Ridge. There are sparsely populated ranches to the south.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The exterior is completely fenced with boundary and interior pasture fences, plus there are water developments for the management of permitted livestock. The area has received past extensive vegetative manipulation such as sagebrush and wyethia spraying, burning and rangeland drilling. There are low standard jeep trails throughout the area, and travel is, at this time, restricted to designated routes.

B. OPPORTUNITIES FOR SOLITUDE

The views from within, especially to the south, east and west are for long distances and are of similar terrain and vegetative types. The area is basically gentle in nature and any camping or travel in the interior would normally be within sight distance of people both inside and outside the area.

C. PRIMITIVE RECREATION OPPORTUNITIES

The limited size and lack of topography and vegetative diversity would be major factors influencing the limited opportunities for solitude and primitive recreation. The area can easily be traveled by all modes without challenges to the traveler. Wildlife presents no threat to visitors.

D. OTHER FEATURES

There are no remarkable geographical, topographical or cultural features in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

The area would be difficult to manage as a wilderness due to open terrain. It would be difficult to prevent intrusion by motorized vehicle travel, since there is a lack of well defined topographical boundaries. Any boundary change to exclude intrusions would only reduce the size of the area and lower the nonwilderness capabilities. The area, in its present condition, is small and there are no contiguous public lands which could be adjoined without crossing existing roads.

1977 Inventory Acres:	13,900 gross	13,900 net
1983 Inventory Acres:	14,138	14,138
Change	+ 238	+ 238

Change in inventoried acres is due to acre recalculation done in the Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

LONE BUTTE ROADLESS AREA
Area Descriptor: 1-028

CATEGORY	UNIT	VALUE
Gross Acres	acres	14,138
Net Acres	acres	14,138
Recreation		
Primitive	RVD'S	179
SPNM	RVD'S	260
SPM	RVD'S	257
Range		
Existing obligated suitable	Acres	14,138
Allotments	# of	4
AUM'S	AUM'S	5717
Existing vacant suitable	Acres	0
Allotments	# of	0
Timber		
Tentative suitable	Acres	401
Standing Volume	MBF	1425

CATEGORY	UNIT	VALUE
Deer		
Winter Habitat	Acres	0
Significant Fisheries		
Stream miles	Miles	12.6
Stream Habitat	Acres	9.8
Lakes	# of	5
Lakes-Habitat	Acres	46
Water Developments		
Existing	# of	1
Minerals Favorability		
Very High	Acres	0
High	Acres	1414
Moderate	Acres	12,724
Low	Acres	0
Claims	# of	5

Resource Potentials, continued

Corridors		
Existing and Potential	# of	0
Wildlife T & E		
Bald Eagle	Acres	0
Big Game		
Winter Habitat	Acres	267
Elk		
Winter Habitat	Acres	0

Oil and Gas Favorability		
Very High	Acres	7069
High	Acres	7069
Moderate	Acres	0
Low	Acres	0
Oil and Gas Leases		
Leased area	Acres	9018

1. Recreation
In area 1-028, recreation is typically dispersed. Hunting is the chief recreational activity, and snowmobiling is very popular.

2. Wildlife
The Lone Butte area provides big game summer range; however, during mild winters, some elk winter near this region.

3. Water
The major water resource in this area is the West Fork of the Madison which carries a high sediment load during periods of runoff. Fish Creek Lake has been dammed for irrigation purposes.

4. Livestock Operations
The entire area is included in intensive grazing management systems.

5. Ecology
The Lone Butte Roadless Area would be viewed as a wilderness example of an ecological grassland type. A wilderness designation would provide more of a scientific protection than a scenic primitive recreation need. The native grasses composition has been altered through 100 years of grazing, but is regenerating due to intensive range systems now being utilized.

6. Timber
Only 401 acres of suitable timber lie within the roadless area. Timber occurs as relatively isolated pockets of aspen and Douglas-fir.

7. Minerals/Oil and Gas
Geologic favorability for locatable minerals is moderate (90%) to high (10%). Geologic favorabililty for oil and gas is high (50%) to very high (50%). Oil and gas leasing and geophysical exploration have occurred and are expected to continue.

8. Cultural Resources
Historical use of the Gravelly Range area by native Americans suggests that historical sites may exist within the roadless area.

9. Land Use Authorizations
There are no land use authorizations.

10. Non-Federal Lands
There are no private lands in the roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire presents little danger to this area; the major impact of wilderness designation would be in the use of fire for vegetative manipulation of the forage resource.

2. Insect and Disease
Because the timber is located in isolated pockets, the threat of insect infestation and disease is minor.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The nearest wildernesses are the Anaconda-Pintler, the Lee Metcalf, and a wilderness in Wyoming east of Yellowstone Park. The closest major community would be Idaho Falls, Idaho; approximately 80 miles distant.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
Most of area 1-028 was identified in RARE I as essentially roadless. However, the area was not selected as a wilderness study area candidate through that process.

The Lone Butte area was inventoried as roadless in the 1977 RARE II process. The wilderness potential of the roadless area was evaluated in the Forest planning process being conducted on the Forest concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS designated lands within this roadless area for resource uses other than wilderness. Consequently, the Lone Butte Roadless Area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decision made for this roadless area did not appear to be controversial to Forest publics.

The Lone Butte area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range of this area. Opponents wrote that the area had "no special qualities," was roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was concern expressed that the roadless areas in the Gravelly Range remain roadless. There was little support expressed for wilderness designation of this area. The Greater Yellowstone Coalition has identified this area as part of the Greater Yellowstone Ecosystem and has expressed interest in wilderness designation for this and other roadless areas in the Gravelly Range.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Lone Butte Roadless Area (1-028)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: (Wilderness)	0	0	14,138	0	0	0	0	14,138	0	0
Group 2: (Timber)	0	71	0	0	71	71	0	0	71	0
Group 3: (High Range, High Range with Low Intensity Wildlife No Timber)	0	7068	0	0	0	4666	6291	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	14,138	71	0	14,138	5655	71	71	0	5585	57
Group 5: High Range/High Wildlife, Mod/Low Range, Wildlife No Timber)	0	6928	0	0	8412	9330	7776	0	8482	14,081
TOTAL:	14,138	14,138	14,138	14,138	14,138	14,138	14,138	14,138	14,138	14,138

* Land designations are the same for H, HA and H(Dept); therefore only H is displayed.
** Land designations are the same for S and SA; therefore only S is displayed.

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	0	71	0	0	71	71	0	0	71	0
Roadless:										
Decade 1	14,138	14,138	0	14,138	14,138	14,138	14,138	0	14,138	14,138
Decade 5 *	14,138	14,067	0	14,138	14,067	14,067	14,138	0	14,067	14,138
Wilderness:	0	0	14,138	0	0	0	0	14,138	0	0

* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The entire Lone Butte Roadless Area 1-028 is designated wilderness in Alternatives C and I. No other alternatives designate any portion of the Lone Butte area to a wilderness emphasis.

wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 401 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 1.4 MMBF in standing volume. The timber occurs as relatively isolated pockets of aspen and Douglas-fir. Extensive, costly roading would be necessary to harvest these pockets of timber.

Current livestock grazing, 5717 AUM's, could continue on the portions of the 4 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change significantly, because existing forage and timber security levels would be maintained. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Permanent grasslands would continue to provide necessary forage for summer elk range.

Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System.

Social and economic effects center around the resource values of minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes mineral development, the related industries would not be supported by this emphasis. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. The geologic favorability for oil and gas is very high for 50 percent of the area.

Exercise of valid existing rights on five mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 9018 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retential)

Portions of the Lone Butte Roadless Area (1-028) are assigned these prescriptions in Alternatives B, F, G and W, but no alternative assigns more than one percent (71 acres) to these emphases. Therefore, timber harvest activities would be minimal and would not apply to the roadless area as a whole.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Between 32 and 50 percent of the Lone Butte Roadless Area (1-028) is assigned these emphases in Alternatives B, G and H.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not as severe as those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.
>
> Primitive and semi-primitive recreation opportunities may be adversely affected in some of these emphases.
>
> Water quality and fisheries could be affected, but effects would be mitigated in accordance with the Forest standards and guidelines.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

All or portions of the Lone Butte Roadless Area (1-028) are assigned these emphases in all Alternatives except C and I. One hundred percent of the area is assigned to these emphases in Alternatives A and D; 40 percent in Alternatives F and W; one percent in Alternatives B, G, H and S.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. ASsignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. The geologic favorability for oil and gas is very high for 50% of the area.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Lone Butte Roadless Area (1-028) are assigned these emphases in all alternatives except A, C, D and I; from 49 percent in Alternative B to 99 percent in Alternative S (the Proposed Action).

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Elk security will be maintained.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

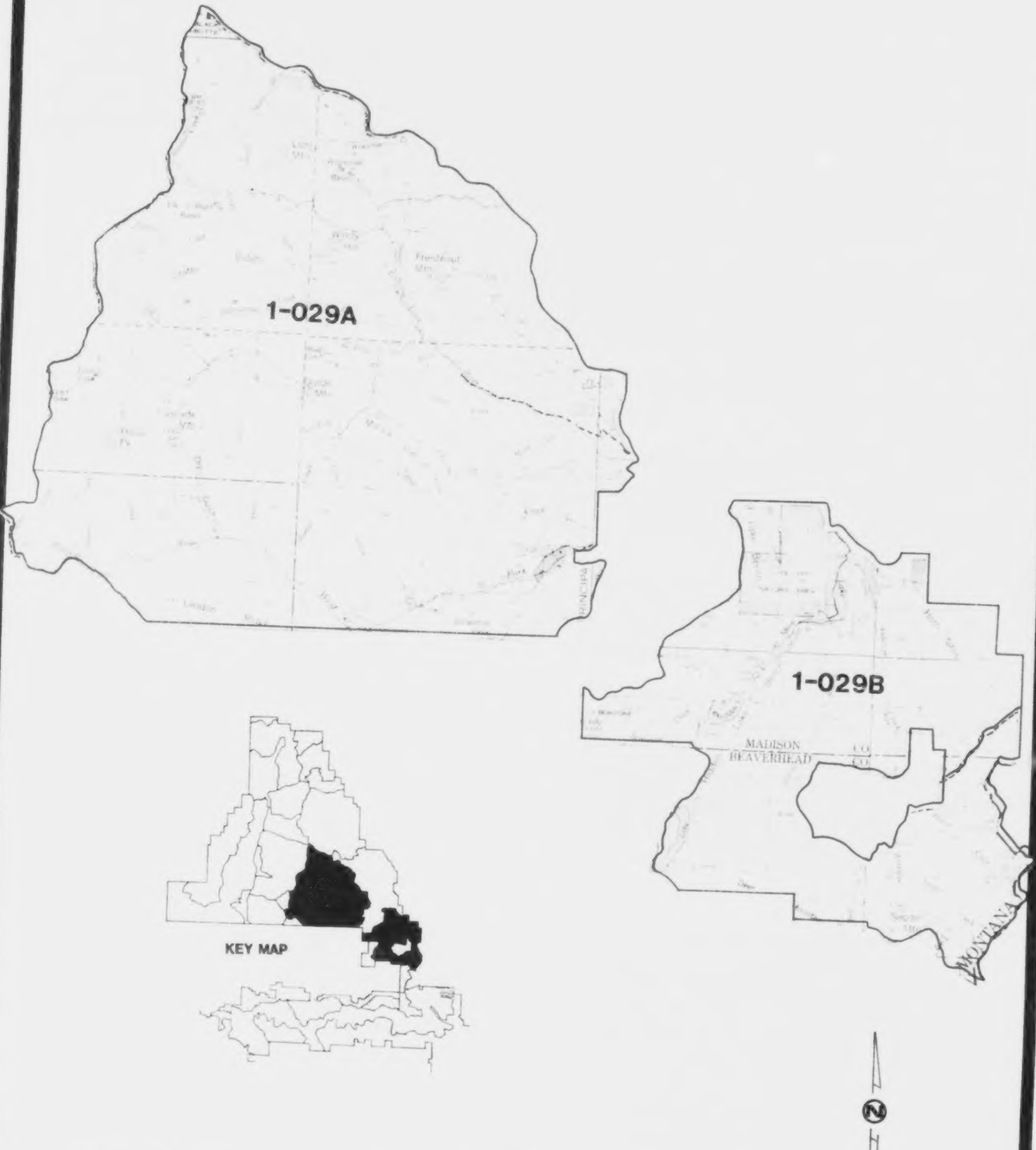
Burning for range improvement would maintain timber-range ecotones in sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. The geologic favorability for oil and gas is very high for 50% of the area.

ROADLESS AREA 1-029

FREEZEOUT MOUNTAIN


1-029A
1-029B
MADISON CO
BEAVERHEAD CO
MONTANA
KEY MAP
0
1
2
3 Miles
Scale

GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-029 Freezeout Mountain	Gross Acres	Net Acres
1-029A	65,954	65,794
1-029B	29,384	29,304
Total	95,338	95,098

I. DESCRIPTION

The Freezeout Mountain Roadless Area is located in the Gravelly Range south of Black Butte and extends into Antelope Basin near the Idaho border. It includes the south end of the Gravelly Range and is composed of two distinct units, 1-029A and 1-029B.

Area 1-029A stretches eastward from the eastern slopes of the Gravelly Mountain range toward the headwaters of the Gazelle, Bogus, and Freezeout Creeks, and contains the West Fork of the Madison and Elk River drainages. Access is provided on most of the western edge by the Gravelly Range road (#290) and on the northern border by the Standard Creek road (#237). Both of these roads are closed to all motorized vehicles, except snowmobiles, from April 1 to July 1 (Beaverhead Forest Travel Plan). Many miles of trail and old wheel tracks criss-cross the area, except in the Blue Lake area in the Elk River drainage. Most of these trails are open yearlong to vehicles under 40 inches in width.

Area 1-029B begins north of the Cliff Lake Natural Area and extends south into the Antelope Basin area near the Idaho border. Elk and Hidden Lakes and the southern portion of Cliff Lake lies within the boundary of this area. Access to and within the area is provided by many miles of road on which, for the most part, travel is restricted to the designated route. Trails from the north, west and east access Hidden, Goose, and Otter Lakes and the southern tip of Cliff Lake. Access to Elk Lake is via the Centennial Valley to the south of the area.

Landscapes are diverse, but the overall appearance is one of gentle to moderately steep foothills, broad ridgetops and undulating basins, interspersed with rocky canyons and small rocky ridges.

Rolling foothills with long, moderate to moderately steep slopes occur along the West Fork Madison River in the southern part of 1-029A. Lobo Mesa, in the middle of 1-029A, is a broad, gently sloping, high upland. Large, deep canyons with steep rocky sideslopes occur along Elk River.

In area 1-029B, west of Spring Branch Creek, broad, gently sloping benches dominate. Wade, Cliff and Hidden Lakes occupy a deep, steep-sided rocky canyon cut into the surrounding benchlands. Large, broad, gently sloping benches dominate the land west of Spring Branch Creek.

Elevations vary from 6,800 feet to over 10,170 feet.

Volcanic rocks are the predominant parent materials. The biggest exception is in the southeastern portion (1-029B) where soils are derived from metamorphic rocks, mainly schists and phyllites. Soils developed from welded tuffs, rhyolite and associated volcanic rocks are commonly deep, fine sandy loams with clay loam subsoils. Soils developed from the schists and phyllites are often loams and silty clay loams.

Vegetation in the northwestern part of 1-029A is predominantly forest with lodgepole pine, Douglas-fir, Engelmann spruce and subalpine fir being the major species. In the southwest, vegetation is about two-thirds grassland, sagebrush/grassland, and one-third forest. Large blocks of forest cover the south central area and along the lower, north-facing slopes of Elk River. Lodgepole pine, Douglas-fir and Engelmann spruce are the common species. Numerous small patches of whitebark pine and subalpine fir are scattered throughout. Subalpine grassland occurs on the higher elevation ridges and basins.

In 1-029B, vegetative cover on the broad benches is about half grassland parks and half forested. Lodgepole pine and Douglas-fir are the major forest species. Grassland and sagebrush/grassland dominates on mid-elevation north slopes, with scattered patches and open stands of aspen and Douglas-fir.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The overall appearance of this area is quite natural; however, both portions of the area have a significant number of localized developments. Most of the area shows the evidence of man's development, and the integrity of the area has been heavily impacted.

B. OPPORTUNITIES FOR SOLITUDE

Opportunities for solitude are quite limited as a result of easy access to most parts of both regions by trail, and, particularly in area 1-029B, by low standard roads.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities are limited and challenging experiences are rare in both portions of area 1-029.

D. OTHER FEATURES

There are no remarkable topographical, geolgraphical or cultural features in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

Area 1-029 would not be manageable as wilderness as a single whole unit. The Meridian Creek timber sale has cut the area into two distinct units separated by an area of extensive development.

Area 1-029A, or a large portion thereof, could be managed as wilderness. Most of the intrusions are trails that have been limited to use by vehicles 40 inches wide or less, and the impacts of these trails could be mitigated by closures. However, this area is grazed by livestock under intensive grazing systems, and there are fences and stock watering systems in the area. A boundary adjustment could be made to remove 160 acres of private land from 1-029A.

There are numerous low standard roads and developments in area 1-029B. It would be especially difficult to redefine a manageable boundary to both remove impacts and leave an area of sufficient size to be managed as wilderness.

It is not possible to combine 1-029A with other Beaverhead roadless areas because of road developments on its western boundary. Area 1-029B is isolated from other roadless areas.

1977 Inventory Acres:	99,100 gross	98,860 net
1983 Inventory Acres:	95,338	95,098
Change	- 3762	- 3762

Reasons for change in inventory acres:		
Existing Timber Sale and roads	- 2810	- 2810
Acreage Recalculation	- 952	- 952

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-029A VALUE	1-029B VALUE	COMBINED VALUE
Acres				
Gross	Acres	65,954	29,384	95,338
Net	Acres	65,794	29,304	95,098
Recreation				
Primitive	RVD's	831	370	1201
SPNM	RVD's	1210	539	1749
SPM	RVD's	1197	533	1730
Range				
Existing obligated suitable	Acres	40,877	23,229	64,106
Allotments	# of	8	9	12*
AUM's	AUM's	13,001	8475	21,476
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0
Timber				
Tentative suitable	Acres	15,140	8489	23,629
Standing Volume	MBF	79,981	43,213	123,194
Corridors				
Existing/Potential	# of	2	0	2
Wildlife T&E				
Bald Eagle	Acres	0	21,923	21,923
Peregrine Falcon	Acres	0	10,970	10,970

Resource Potentials, (continued)

Big Game				
Winter Habitat	Acres	12,672	5445	18,117
Elk				
Winter Habitat	Acres	2120	1073	3193
Deer				
Winter Habitat	Acres	0	429	429
Significant Fisheries				
Stream Miles	Miles	80.9	21.6	102.5
Stream Habitat	Acres	37.7	14.4	52.1
Lakes	# of	26	7	33
Lake Habitat	Acres	47	602	649
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	3500	9768**	13,268
High	Acres	29,397	9768	39,165
Moderate	Acres	32,897	9768	42,665
Low	Acres	0	0	0
Claims	# of	9	7	16
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	65,794	0	65,794
Moderate	Acres	0	29,304	29,304
Low	Acres	0	0	0
Oil and Gas Leases				
Leased area	Acres	45,574	3340	48,914

* Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of areas.

** VH for decorative stone; same acres are H for locatable minerals.

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1. Recreation

Recreation use of the areas in 1-029 is heavy. Snowmobiling and trailcycling are very popular, along with bird and big game hunting, camping and fishing.

Near area 1-029B, there are three small resorts available to serve the public. There is also a public boat landing on the southeastern-most finger of Cliff Lake.

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion and black bear. Upland game birds, such as sage, spruce and blue grouse are also found in the unit. A wide variety of non-game wildlife species utilize the area, especially furbearers and raptor species such as the golden eagle and ferruginous hawk.

This roadless area is primarily big game summer range. However, a few elk occasionally winter on the south-facing slopes of the West Fork of the Madison River and on Horn Mountain, Elk Mountain and in the vicinity of Elk Lake. There are also moose, black bear, and upland birds.

There was a confirmed Grizzly bear sighting near Cliff Lake in 1982, but this was considered to be a sporatic occurance and resident grizzlies are not known to occupy the area.

The lakes in 1-029B are surrounded by potential nesting habitat for Bald eagles, Peregrine falcons and osprey. There are active bald eagle (an endangered species) nests at Cliff Lake, Wade Lake and Elk Lake. The lakes provide Trumpeter swan nesting habitat, and there is presently an active swan nest on Goose and Elk Lakes.

In area 1-029A, Lower Elk River has a good rainbow trout population and is fished frequently during the summer. Upper Elk River contains native cutthroat trout but is fished infrequently because of its remoteness. Blue Lake is a popular fishing spot.

Elk, Hidden, and Cliff Lakes (1-029B) have thriving populations of resident trout and receive a lot of fishing use. Elk Lake produces a fishable population of the uncommon Arctic grayling.

3. Water

Because of geological instability, management of area 1-029A is important to water quality in the West Fork and the Madison River. The West Fork of the Madison River carries a high sediment load during periods of high runoff.

The chain of lakes - Cliff, Goose, Otter, Hidden and Elk - occur in area 1-029B.

4. Livestock Operations

Area 1-029 includes most of 4 sheep and 8 cattle allotments and is currently grazed by approximately 8000 sheep and 3000 cattle. There are several cow camps, many miles of fence, numerous stock watering systems,and several cabins used by stockmen. Almost all of the area, particularly that occurring in 1-029B, is under intensive grazing systems for cattle under rest rotation grazing systems.

5. Ecology

Upper elevations exhibit mostly sub-alpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of the timbered areas are currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the area but are primarily contained in riparian and wetter areas. Lower elevations are primarily rolling grassland and grass/sagebrush hills.

6. Timber

There are approximately 17,256 acres of suitable timber in area 1-029A and 11,793 acres in area 1-029B. Much of the timber is lodgepole pine that is heavily infested with bark beetles.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is moderate, however, one third of 1-029B is rated very high for decorative stone, one third of 1-029B is rated high for decorative stone, and 50% of 1-029A is rated very high to high for decorative stone. The locatability of the decorative stone has not been determined, so it is included in the locatable minerals favorability rating at the present time. A considerable volume of common variety decorative stone has been produced from 1-029B. U.S. Steel has a large iron claim group in Wolverine Creek. Most of the high country has been withdrawn as a phosphate reserve. Geologic favorability for oil and gas is moderate (1-029B) to high (1-029A). Oil and gas leases cover much of the area.

8. Cultural Resources

There is evidence of old Indian campsites along the top of the Gravelly Range in area 1-029A. Other sites may also exist.

9. Land Use Authorizations

Three special use permits in area 1-029A cover the Cave Mountain road, the Mayberry Cabin and pasture south of the Lobo Mesa area, and a West Fork Stock Grazing Association cabin and pasture one-quarter mile inside the Forest boundary north of Red Rock Lakes.

There are approximately 25 special use permits in area 1-029B. These include a marina, roads, experimental range plots, dams, reservoirs, and miscellaneous range improvements.

10. Non-Federal Lands

There are 160 acres of private land in area 1-029A and 80 acres in area 1-029B.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

The incidence of fire is low at this time. With the mountain pine beetle in epidemic stages, all of the lodgepole pine timber is being rapidly destroyed. The fire hazard in these areas will become severe if some timber harvest is not done.

2. Insect and Disease

Mountain pine beetle is in epidemic stages and is destroying the lodgepole pine.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The Lee Metcalf Wilderness is about 20 miles from these areas; the Anaconda-Pintler is about 100 miles away. Use in these wilderness areas is low-to-moderate.

Bozeman is about 70 miles away; Butte, 100 miles; and Billings, 300 miles.

2. Contribution to Wilderness Preservation System

This area would contribute ecological diversity to the National Wilderness Preservation System, representing low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest

Two RARE I roadless areas (all of area #56, Freezeout Mountain, and a portion of #57, Hidden Lake) lie within this roadless area. The remainder of area 1-029 was identified in RARE I as essentially roadless. The area was not selected as a wilderness study area candidate through that process.

The Freezeout Mountain area was inventoried as roadless in the 1977 RARE II process. The wilderness potential of the roadless area was evaluated in the Forest planning process that was being conducted concurrently with RARE II. The 1978 Forest Land Management Plan and Final EIS designated lands within this roadless area for resource uses other than wilderness. Consequently, the Freezeout Roadless Area was dropped from further wilderness consideration in RARE II. The wilderness/nonwilderness decision made for this roadless area did not appear to be controversial to Forest publics.

The Freezeout Mountain area was again inventoried as roadless in the "1983 Roadless Area Evaluation" for the current planning process. Although some members of the public said that the Forest should "manage the entire Gravelly Range as wilderness to protect against developments that would ruin watershed, wildlife, and recreation qualities," there was obvious controversy as to whether specific roadless areas in the Gravelly Planning Unit should be managed for wilderness, roadless, or other values. Proponents of wilderness cited their concerns for the excellent big game range of this area. Opponents wrote that the area had "no special qualities," was roaded and had other resource values that should be explored and/or utilized. Some members of the public said that the areas should be managed as roadless without wilderness designation.

In public comments on the 1985 Revised Draft EIS and Proposed Forest Plan Supplement, there was concern expressed that the roadless areas in the Gravelly Range remain roadless. There was little support expressed for wilderness designation of these areas. The Greater Yellowstone Coalition has identified this area as part of the Greater Yellowstone Ecosystem and has expressed interest in wilderness designation for this and other roadless areas in the Gravelly Range.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Freezeout Mountain Roadless Area (1-029A&B)

Management Emphases		Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Group 1: 1/	1-029A	0	0	65,794	65,794	0	0	0	65,794	0	0
	1-029B	0	0	29,304	0	0	0	0	29,304	0	0
Group 2: 2/	1-029A	3290	6579	0	0	16,449	3290	3290	0	6579	3270
	1-029B	3120	1465	0	1172	4396	1465	1465	0	2051	1084
Group 3: 3/	1-029A	0	19,738	0	0	23,027	26,318	32,897	0	6579	0?
	1-029B	0	7326	0	700	293	14,652	14,652	0	0	0
Group 4: 4/	1-029A	57,804	26,318	0	0	16,449	23,027	19,738	0	23,029	19,271
	1-029B	26,184	5861	0	27,432	12,893	7326	8791	0	24,323	9817
Group 5: 5/	1-029A	4700	13,159	0	0	9869	13,159	9869	0	29,607	43,253
	1-029B	0	14,652	0	0	11,722	5861	4396	0	2930	18,403
TOTAL:	1-029	95,098	95,098	95,098	95,098	95,098	95,098	95,098	95,098	95,098	95,098

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* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis

Management Emphasis	Alternative (Net Acres) A	B	C	D	F	G	H	I	W	S
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 *	15,400	8364	0	0	26,085	5385	5165	0	7792	5165
Roadless:										
Decade 1	95,098	95,098	0	29,304	95,098	95,098	95,098	0	95,098	95,098
Decade 5 *	79,698	86,734	0	29,304	69,013	89,713	89,933	0	87,306	89,933
Wilderness:	0	0	95,098	65,794	0	0	0	95,098	0	0

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* The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

1. Designation: Wilderness
Management Emphasis: Wilderness

The Freezeout Mountain Roadless Area (1-029A&B) is designated wilderness in Alternatives C, D, and I. 100 percent of the area is designated wilderness in Alternatives C and I; 69 percent of the area is designated wilderness in Alternative D.

Wilderness can enhance the area's wilderness attributes since many of the existing uses and facilities are not usually associated with wilderness designation. The existing roads, which are used for recreation and for range management and other motorized activities associated with fence and water development maintenance, could be eliminated. The trail systems established in both of these units could be used for foot travel to the places of interest in each of these areas. Without snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The prohibition of roads would adversely effect permittees who hold special use permits for access roads, dams, reservoirs and a marina on Wade Reservoir.

Wilderness designation for all of this area would result in two distinct areas separated by timber sale activities and roads in the Meridian Creek drainage.

The 15,140 to 23,629 acres of land suitable for timber production would not be available under this prescription. This would remove about 80 to 123 MMBF in standing volume from the Forest timber base depending upon the alternative chosen. The suitable timber is in scattered blocks throughout both 1-029A and 1-029B. Mountain pine beetle currently infests the lodgepole pine. Wilderness precludes the use of timber harvest or other management activities to limit the spread of mountain pine beetle into other lodgepole pine stands.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas outside wilderness that remain in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing is a major use of this area (1-029A: 13,001 AUM's; 1-029B: 8475 AUM's) and would continue on the portions of the 12 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Both areas 1-029A and 1-029B provide big game summer range and some winter range. Forage for wildlife would be maintained, existing big game populations would be provided for, and some loss of big game security (hiding and resting) cover has already occurred in lodgepole pine stands infested by mountain pine beetle. Further reduction of security cover will be limited because as the dead trees deteriorate and fall, the resulting downfall on the ground makes foot and horse travel difficult and discourages persons from entering the area.

Wilderness management around the lakes in area 1-029B would protect the existing bald eagle and trumpeter swan nests and potential nesting habitat for peregrine falcons, osprey, bald eagle and trumpeter swans.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts from range improvements, trails, and signs would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.
>
> The absence of timber activities under this designation will allow the mountain pine beetle to go unchecked in the lodgepole pine stands. The beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development for decorative stone, the related industries would not be supported by this emphasis. Timber supply, Forest-wide, would drop, resulting in a loss of some jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. One third of 1-029B has very high favorability for decorative stone.

Exercise of valid existing rights on 16 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 48,914 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area. The area would be withdrawn as current oil and gas leases expire.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Freezeout Mountain Roadless Area (1-029A&B) are assigned these prescriptions in all Alternatives except C and I; from only 1 percent in Alternative D to 22 percent in Alternative F.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities. Lands adjacent to main access roads and areas viewed from the larger lakes would come under these prescriptions.

Roads constructed for timber harvest eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest openings. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the harvest units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area. Because the timber is in scattered blocks, roads will cross over areas with nonwilderness, but no timber harvest prescriptions.

Range resources would benefit by the creation of transitory range in timber harvest openings which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.
>
> The opportunities for primitive and semi-primitive nonmotorized recreation will be reduced or eliminated in portions of the two areas. The roadless character of lands around Blue Lake are not impacted by these prescriptions. Opportunities for roaded natural appearing recreation such as viewing scenery and flowers would increase where roads are constructed.
>
> Elk security will be reduced in the short-term as harvest openings occur and reduce total cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists.
>
> Water quality and fisheries would be adversely affected locally as sediment increases because of road construction and timber harvest. The adverse affect would be localized and diminish downstream because the impact is distributed in many drainages and across the two areas.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. One third of 1-029B has very high favorability for decorative stone.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Freezeout Mountain Roadless Area (1-029A&B) are assigned these prescriptions in all Alternatives except A, C, I and S; from as little as 1 percent in Alternative D to 50 percent in Alternative H.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, wheeltracks and foot trails, and disturbed vegetation and wildlife tend to reduce the naturalness of and opportunities for solitude in the area.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production because of better utilization by livestock of existing forage. However, range activities under these prescriptions would not irretrievably affect the wilderness potential. Increased livestock utilization of forage on elk or deer winter range would adversely effect potential elk or deer habitat.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality is reclaimed by allowing the remaining vegetation to regrow.
>
> In parts of the areas, primitive and semi-primitive recreation opportunities may be disrupted by the location of a fence or water development.
>
> Water quality and fisheries should continue at their present level.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce.

Representation of older age and larger size classes of timber would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the areas that receive the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change some, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive
Recreation/Custodial

Portions of the Freezeout Mountain Roadless Area (1-029A&B) are assigned these prescriptions in all alternatives except C and I; from 29 percent in Alternative D to 88 percent in Alternative A.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. Roads exist in area 1-029B that provide access to Wade Reservoir, Cliff Lake, and Elk Lake. Developed recreation facilities are located at Cliff Lake, Elk Lake and Wade reservoir. As roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk and deer habitat will be maintained.

The current roadless character of the Blue Lake area would remain unchanged under these prescriptions.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions foregoes the value and use of any lodgepole pine lost to the mountain pine beetle. As the beetle epidemic kills the larger trees it will leave an extreme fire hazard. If fire is allowed to occur, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. One third of 1-029B has very high favorability for decorative stone.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Freezeout Mountain Roadless Area (1-029A&B) are assigned to these emphases in all alternatives except C, D and I. As little as 5 percent in assigned in Alternative A. In Alternative S (the Proposed Action) 65 percent of the area is assigned to these emphases.

Road building in these areas, to access other management areas, would be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area. Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase.

Range activities under acres assigned low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

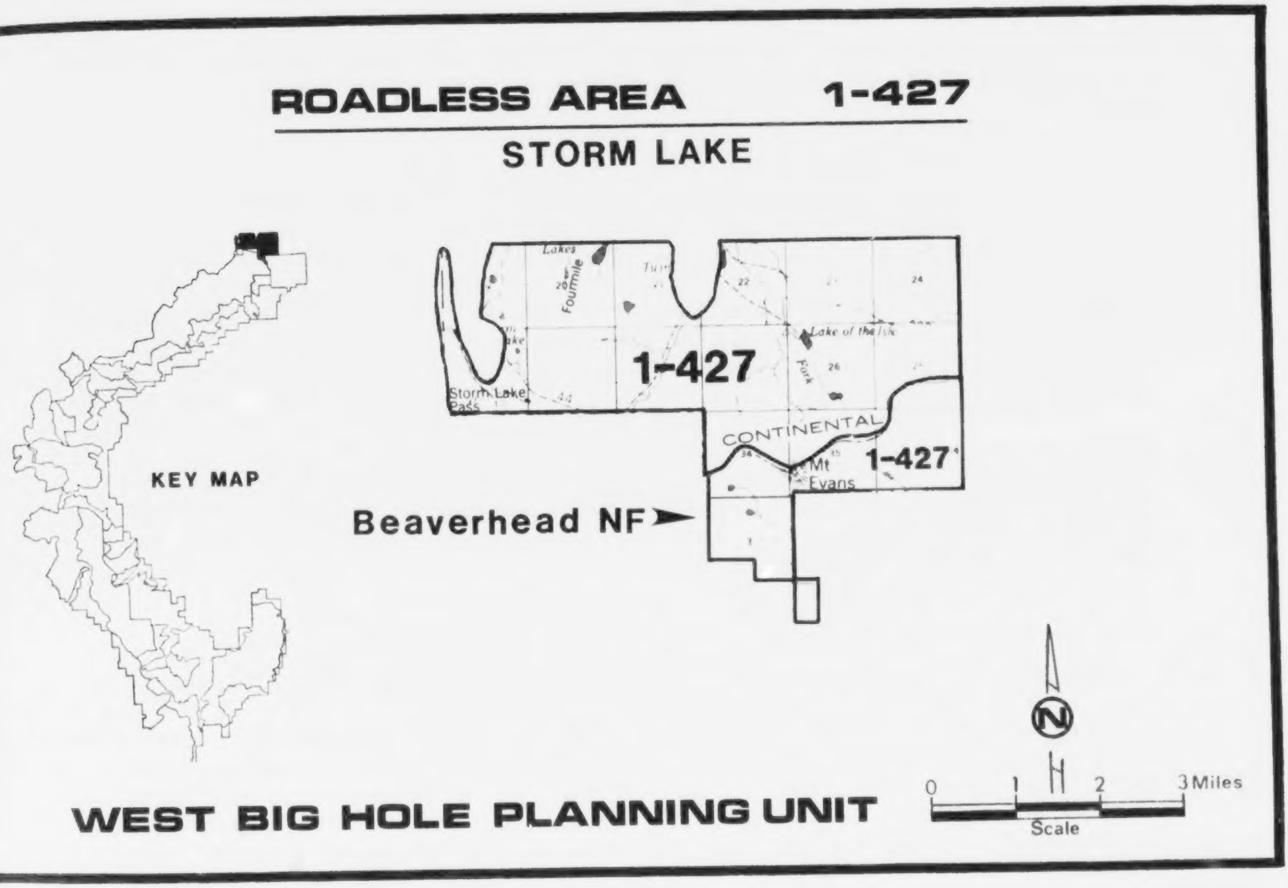
Elk security would be maintained and the elk population level would remain the same or increase.

In general, water quality and fisheries would be unaffected. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. One third of 1-029B has very high favorability for decorative stone.


ROADLESS AREA 1-427
STORM LAKE
KEY MAP
Lakes
Fourmile
Storm Lake Pass
1-427
Lake of the Isle
Fork
CONTINENTAL
1-427
Mt Evans
Beaverhead NF
N
0
1
2
3 Miles
Scale
WEST BIG HOLE PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-427	Gross Acres	Net Acres
1-427 Storm Lake	1953	1808
1-427 (Deerlodge)	7605	5673
Total	9558	7481

I. DESCRIPTION

The Storm Lake Roadless Area lies in southwestern Montana within Deer Lodge County. Portions of the Beaverhead National Forest have been administered by the Deerlodge National forest. The area's western and southern boundary is adjacent to the Anaconda-Pintler Wilderness, situated approximately 15 miles west of Anaconda. Although 1-427 contains no transportation systems, the closest access is provided by the heavily roaded Mt. Haggin addition. Primary road access begins at the Mill Creek Highway at Six-Mile Creek.

Landforms include strongly scoured cirque basins and deep U-shaped glacial trough valleys. At lower elevations, these glacial valleys end in broad, rolling to undulating moraines separated by long, broad gently sloping ridges. The rocks making up the mountains in T4N, R13W, Section 21, 22, and

29 are brightly colored. In the basins to their northeast are small kettles and larger lakes found in sheer-sided cirques. The lakes are blue-black in color.

The area includes the majestic Mount Evans, one of the most prominant peaks in the surrounding mountain complex at 10,641 feet. Elevations range from 10,641 feet at the top of Mount Evans to about 7800 feet at the area's northern boundary. As the backbone of the Continental Divide, it sawtooths to the east and west. Gray and black crags fall off the Cols and Horn peaks along the divide. Large snowfields stay most of the year at the heads of monolithic causeways sculptured by the retreat of glaciers in years past. Large rocks dissect and divide into hundres of isolated alcoves. Pure stream outlets tumble over jagged rocks on their way to the next lake in the chains.

The large diversity of trees makes up for the fact that only half of the area is vegetated. The area is very sparsely forested with alpine larch and whitebark pine along with lodgepole, Englemann spruce, Douglas and subalpine fir, and gnarled krummholtz. Much of the vegetation consists of low lying shrubs and forbes. Mosaics of wet meadows and whitebark pine-subalpine fir forests are typical of the glacial cirque basins.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

This area appears very natural internally, but the Beaverhead portion looks directly into the extensive logging and development of the Mt. Haggin addition. It is very similar in characteristics to the adjacent Anaconda- Pintler Wilderness. In the Deerlodge portion, effects on the natural processes are rated as very low or none. Less than 15 percent of the area has had human impact. With a minor amount of time and money to correct some situations, duration of impact would last about five years. Except around Storm Lake, the area remains in its natural state.

A portion of the Storm Lake Roadless Area (section 3) is included in the Mt. Haggin timber sale contract to Louisiana Pacific. This contract is scheduled to terminate in 1993. The terrain and vegetation of Section 3 make it unlikely that any logging will occur within the area that would significantly affect the wilderness attributes of the area.

Old mining activity on the western shore of Storm Lake is well healed over. It has a low impact on the natural integrity, but could easily be separated from the area.

Snow course equipment is located in T4N, R13W, Section 30. It could be moved outside the unit.

Off-road vehicle tracks are imprinted on Storm Lake's eastern shore. The soil is moist and fertile. Natural regeneration would heal the damage in a short amount of time. A sound barrier and signing may be needed.

B. OPPORTUNITIES FOR SOLITUDE

The distance from the perimeter to the core of this area varies between one to three miles. As an addition to the Anaconda-Pintler Wilderness, the distance to the core will exceed five miles. The opportunities for solitude are outstanding, especially when coupled with the topographical screening. Visibility of offsite intrusions are limited to the Mt. Haggin logging developments and an obtrusive dam in the Storm Lake drainage.

C. PRIMITIVE RECREATION OPPORTUNITIES

Recreation opportunities are outstanding in every season of the year. Trails lead from easy access points for day-hikers; trails for extended pack trips are well marked and easy to follow. Not all lakes and peaks have trails leading to them offering a challenge to exploratory visitors.

Climbing is available on granitic faces. Narrow rock clefts are abundant for chimneying. In late winter, ice forms at higher elevations allowing the perfect opportunity for ice climbing for experienced mountaineers.

Fishing for cutthroat trout and hunting for big game animals in this territory presents a risk not found at lower elevations. Ice fishing is popular at Storm Lake.

D. OTHER FEATURES

With the diversity of vegetation and spectacular geologic features, this area offers the naturalist and casual visitor a unique natural museum to investigate.

E. MANAGEABILITY AND BOUNDARIES

The boundary is manageable as it exists, but there is a significant area below this unit in the Mt. Haggin addition which, if added, would vastly improve the manageability, integrity, solitude and primitive recreation opportunity. Although this area in the Mt. Haggin addition is not scheduled for development, it will not be released from an existing timber sale contract with Louisana-Pacific until 1992.

The southern boundary of this unit is contiguous to the Anaconda-Pintler Wilderness boundary. Wilderness and land values on the remaining boundaries are not so distinctive that minor boundary adjustments are precluded. The access points into this densely forested area are limited and can be regulated. Final determinination of the exact Wilderness boundaries would require use of aerial photos, contour maps, field work and judgement.

Beaverhead NF		
1977 Inventory Acres	*	*
1983 Inventory Acres	1953	1808
Deerlodge NF		
1979 Inventory Acres	9700	7620
1983 Inventory Acres	7605	5673
Change	- 2095	- 1947
Reasons for change in inventory acres:		
Transfer of Administration	- 1953	- 1808
Acreage Recalculation	- 142	- 139

* In 1977, Storm Lake acres for the Beaverhead NF were administered by the Deerlodge NF and included with their 1977 inventory acres.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-427Bvhd. VALUE	1-427Drlg. VALUE	COMBINED VALUE
Acres				
Gross	Acres	1953	7605	9558
Net	Acres	1808	5673	7481
Recreation				
Primitive	RVD's	23	0	23
SPNM	RVD's	151	700	851
SPM	RVD's	33	200	233
Range				
Existing obligated suitable	Acres	0	0	0
Allotments	# of	0	0	0
AUM's	AUM's	0	0	0
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0
Timber				
Tentative suitable	Acres	170	237	407
Standing Volume	MBF	850	1180	2030
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	0	0	0
Summer Habitat	Acres	*	5673**	5673
Elk				
Winter Habitat	Acres	0	0	0
Deer				
Winter Habitat	Acres	0	0	0
Significant Fisheries				
Stream Miles	Miles	1.4	0	1.4
Stream Habitat	Acres	0	0	0
Lakes	# of	15	3	18
Lake Habitat	Acres	42	18	60
Water Developments				
Existing	# of	0	1	1

Resource Potentials, (continued)

Minerals*				
Very High	Acres	0	0	0
High	Acres	1808	1320	3128
Moderate	Acres	0	4353	4353
Low	Acres	0	0	0
Claims	# of	53	80	133
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	1808	0	1808
Low	Acres	0	5673	5673
Oil and Gas Leases				
Leased area	Acres	0	0	0
Leases	# of	0	0	0

* Not Available

** Deer and Elk Winter/Summer Habitat acres were included in this total.

*** Ratings include uranium, geothermal, and other energy resources for the Deerlodge National Forest.

3

1. Recreation
   There are no developed recreational sites. Fishing, goat hunting, camping, and hiking are the main activites here. Recreational opportunities are outstanding in every season of the year.

2. Wildlife
   Some summer elk range is present, but most of this area is mountain goat habitat. Mountain goats inhabit the more rugged terrain along the Continental Divide. No suitable elk or deer winter range is included. There is no fishery present in the area.

3. Water
   Twelve-mile and Sullivan Creeks originate at the several lakes in the area and flow into Deep Creek. Water quality is high.

4. Livestock Operations
   The area presently has no livestock grazing and no existing range allotments. There are very limited possibilities for grazing.

5. Ecology
   The area exhibits higher elevation stands of alpine larch and whitebark pine along with lodgepole, Englemann spruce, Douglas and subalpine fir, and gnarled krummholtz. Much of the vegetation consists of low lying shrubs and forbes. Mosaics of wet meadows and whitebark pine-subalpine fir forests are typical of the glacial cirque basins.

6. Timber
   The unit is sparsely covered with noncommercial timber varieties.

7. Minerals/Oil and Gas

Contains known deposits of gold, silver, lead, and copper, with limited mineral activity taking place. Geologic favorability for locatable minerals for the Beaverhead portion of area 1-427 is high. Geologic favorability for oil and gas is moderate.

Geologic favorability for locatable minerals for the Deerlodge portion of area 1-427 is moderate (77%) to high (23%). Geologic favorability for oil and gas is low.

8. Cultural Resources

There are no identified historic or prehistoric cultural sites.

9. Land Use Authorizations

There are no noncompatible land uses in this roadless area.

10. Non-Federal Lands

The Beaverhead portion of the area contains 145 acres of privately owned land. Over 2000 acres of the private inholdings of the Deerlodge acreage are owned by the Anaconda Company and are part of the Company's watershed for copper smelting operations in Anaconda. The smelting operations have ceased and are now being dismantled and possibilities exist for obtaining this land through exchange.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Due to the rocky nature and sparse vegetation of this area, fire occurrence is very low.

2. Insect and Disease

Insects and disease present little threat to this area.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

This area adjoins the moderately-used Anaconda-Pintler Wilderness.

Major population centers within one day's travel time of the area include:

City	Population
Butte	36,000
Anaconda	10,000
Dillon	4000
Deer Lodge	4000
Helena	24,000
Missoula	33,000
Bozeman	22,000
Billings	67,000
Great Falls	56,000

2. Contribution to Wilderness Preservation System
Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

3. Public Interest
This area, whose boundary structure has been modified slightly since the RARE I analysis, was identified as Storm Lake by both the Beaverhead and the Deerlodge National Forest. During this original evaluation, the area was not selected for wilderness study. However, in the RARE II study, this area was proposed as wilderness. Public comment received from both the 1977 study and the 1983 Roadless Area Evaluation of the Beaverhead portion unanimously favored Storm Lake's inclusion into the wilderness system as it presents no timber or mineral conflicts and adjoins the Anaconda-Pintler Wilderness.

In response to the 1985 Revised Draft EIS and Proposed Plan Supplement, the Wilderness Society and those who supported their proposals and many other individuals indicated support for wilderness designation of this area.

The timber contractor in the Mt. Haggin area indicated that a portion of the area is under contract and there were adjustments made. However, part of the contracted area remains in the wilderness recommendation made in the Forest Plan.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Management Emphasis by Alternative for the Storm Lake Roadless Area (1-427), Beaverhead Portion

Beaverhead Management Emphasis	Alternative (Net Acres)									
	A CD	B	C	D	F	G	H*	I	W	S** PA
Group 1: 1/	1808	0	1808	1808	1808	1808	1808	1808	1808	1729
Group 2: 2/	0	0	0	0	0	0	0	0	0	0
Group 3: 3/	0	0	0	0	0	0	0	0	0	0
Group 4: 4/	0	1808	0	0	0	0	0	0	0	79
Group 5: 5/	0	0	0	0	0	0	0	0	0	0
BEAVERHEAD TOTAL:	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Management Emphasis by Alternative for the Storm Lake Roadless Area (1-427), Deerlodge Portion

Deerlodge Management Emphasis	Alternative (Net Acres)												
	A CD	B	C	D	E	F	G	I	J	K	L	M PA	N
Wilderness: (Relates to Bvhd Group 1, above)	4114	0	0	0	4114	4114	4114	4114	5673	4114	4114	4114	4114
Timber: (Relates to Bvhd Group 2, above)	0	0	237	0	0	0	0	0	0	0	0	0	0
Range: Relates to Bvhd Groups 3 & 5, above)	0	0	0	0	0	0	0	0	0	0	0	0	0
Wildlife: (Relates to Bvhd Group 5, above)	0	0	0	0	0	0	0	0	0	0	0	0	0
Recreation: (Relates to Bvhd Group 4, above)	1559	5673	5436	5673	1559	1559	1559	1559	0	1559	1559	1559	1559
DEERLODGE TOTAL:	5673	5673	5673	5673	5673	5673	5673	5673	5673	5673	5673	5673	5673
ROADLESS AREA TOTAL:	7481	7481	7481	7481	7481	7481	7481	7481	7481	7481	7481	7481	7481

Summary of Management Emphasis, Beaverhead Portion

Management Emphasis	Alternative (Net Acres)									
	A CD*	B	C	D	F	G	H	I	W	S PA**
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 ***	0	0	0	0	0	0	0	0	0	0
Roadless:										
Decade 1	0	1808	0	0	0	0	0	0	0	79
Decade 5 ***	0	1808	0	0	0	0	0	0	0	79
Wilderness:	1808	0	1808	1808	1808	1808	1808	1808	1808	1729

* CD is the Current Direction Alternative.
** PA is the Proposed Action Alternative.
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

Summary of Management Emphasis, Deerlodge Portion

Management Emphasis	Alternative (Net Acres)												
	A CD*	B	C	D	E	F	G	I	J	K	L	M PA**	N
Developed:													
Decade 1	0	0	100	0	0	0	0	0	0	0	0	0	0
Decade 5 ***	0	0	137	0	0	0	0	0	0	0	0	0	0
Roadless:****													
Decade 1	1559	5673	5573	5673	1559	1559	1559	1559	0	1559	1559	1559	1559
Decade 5 ***	1559	5673	5516	5673	1559	1559	1559	1559	0	1559	1559	1559	1559
Wilderness:	4114	0	0	0	4114	4114	4114	4114	5673	4114	4114	4114	4114

* CD is the Current Direction Alternative.
** PA is the Proposed Action Alternative.
*** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.
**** Roadless is defined as 5,000 acres or greater in size or any acreage if contiguous to existing wilderness.

Impacts discussed below are for the whole roadless area. For a more complete discussion of the Deerlodge portion, see the Draft EIS for that Forest.

B. Impacts

1. Designation: **Wilderness**
Management Emphasis: **Wilderness**

100 percent of the Beaverhead Forest's portion of the Storm Lake Roadless Area is designated to wilderness in all alternatives but Alternative B; with the exception of Alternative S (the Proposed Action) which designates 96 percent of the aera to wilderness. (See the Beaverhead Management Emphasis Assignment by Alternative Table, previous to this discussion).

One hundred percent of the Deerlodge Forest's portion of the Storm Lake Roadless Area is designated to wilderness emphasis in Deerlodge Forest Alternative A. Approximately 73 percent of the area is designated to wilderness in Alternatives A, E, F, G, I, K, L, M and N. (See the Deerlodge Management Emphasis Assignment by Alterntive Table, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts for the Deerlodge portion of this roadless area will be contained in the Draft EIS to be issued by that Forest.)

Wilderness designation will enhance the area's wilderness attributes.

The 407 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 2 MMBF in standing volume.

The tentatively suitable timber areas are located in scattered alpine basins. It would be uneconomical to log the timber due to high roading costs and environmental concerns.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes may occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover may be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and foraging areas would be maintained.

Other nonpriced resource values are affected as follows:

Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only.

Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

If fire is excluded from the ecosystem, the stands will move toward climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir and Engelmann spruce.

Water quality would be maintained at natural levels.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. The small amount of timber in this area would have no effect on the timber supply and related industry if the timber was not cut. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would eventually be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 133 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were no oil and gas leases issued in this area. No impact on wilderness character from the exercise of rights granted to lessees or assignees is anticipated.

2. Designation: Nonwilderness
Management Emphases: Timber (Modification/Maximum Modification and Retention/Partial Retention)

None of the Beaverhead portion of the Storm Lake Roadless Area is assigned these emphases in any alternative.

Only Deerlodge Alternative C assigns land (237 acres) to this management emphasis. The Deerlodge Forest's Proposed Action, Alternative M, assigns no acres to this management emphasis. (See the Deerlodge Management Emphasis Assignment by Alternative Table, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts for the Deerlodge portion of this roadless area will be contained in the Draft EIS to be issued by that Forest.)

Implementation of a timber emphasis would eliminate parts of the Deerlodge portion of the roadless area from further consideration for wilderness. Alterntive C (Deerlodge) calls for 100 acres to be developed in the first decade. This would leave approximately 7,381 acres (total) available for wilderness consideration during the next plan revision.

Economic effects are those associated with timber production on a maximum of 407 acres of land classified as tentatively suitable (total for the roadless area). Increased access could also have some economic benefit to the minerals and livestock industries.

Other nonpriced resource values are affected as follows:

Existing visual quality would change on the portions of the roadless area that were harvested and roaded.

Some semiprimitive recreation opportunities would be seriously reduced.

Existing elk security would be reduced due to roading and timber harvest.

There may be some transitory range created for livestock use.

Water and fisheries habitat may be impacted by roading and timber harvest activities.

Average tree age would be reduced, resulting in less old growth.

3. Designation: Nonwilderness
Management Emphases: Range (No Timber, High Intensity Range, and High Intensity Range with Low Intensity Wildlife)

There are no acres allocated to these emphases in either the Beaverhead or the Deerlodge portions.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

All of the Beaverhead portion of the Storm Lake Roadless Area (1-427) is assigned these emphases in Beaverhead Alternative B. 4 percent of the area is assigned these emphases in Alternative S, the Proposed Action. (See the Beaverhead Management Emphasis Assignment by Alternative Table, previous to this discussion for further information about the alternative assignment of the Beaverhead portion of this roadless area.)

The Deerlodge portion of the roadless area is assigned to this management emphases in all the alternatives with the exception of Alternative J. Alternatives B and D assign 100 percent; Alternative C, 96 percent. That Forest's Proposed Action assigns 27 percent of their portion of the roadless area to a recreation management emphasis, as does Alternatives A, E, F, G, I, K, L and N. (See the Deerlodge Management Emphasis Assignment by Alterntive Table, previous to this discussion, for further information about the alternative assignment of the Deerlodge portion of this roadless area. Also, a more complete discussion of the alternative impacts for the Deerlodge portion of this roadless area will be contained in the Draft EIS to be issued by that Forest.)

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

On the Beaverhead portion, assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian. (No Timber)

There are no portions of the Storm Lake assigned these management emphases by either Forest.

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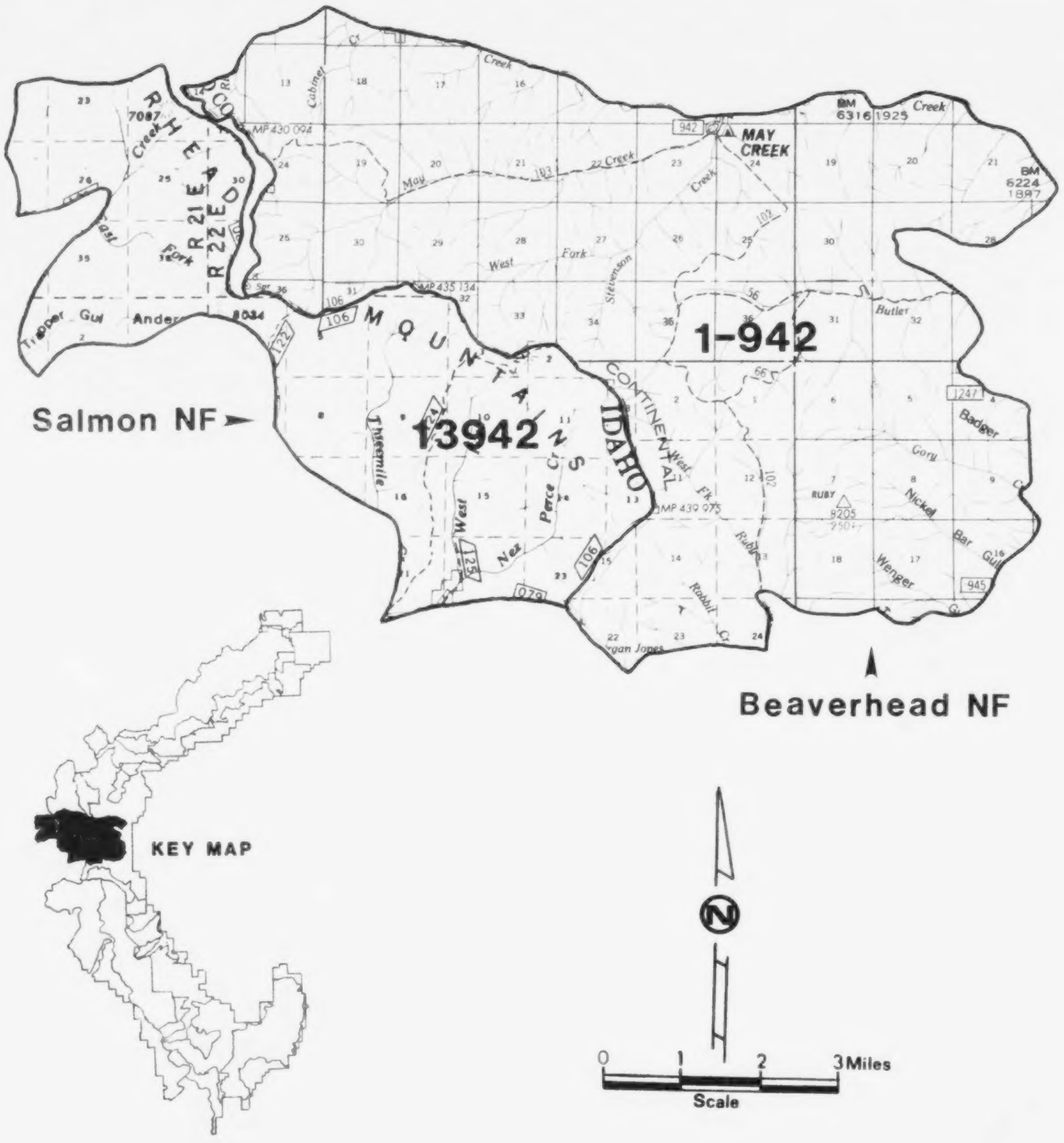
ROADLESS AREA 1-942

ANDERSON MOUNTAIN


1-942
13942
Salmon NF
Beaverhead NF
MAY CREEK
BEAVERHEAD
MOUNTAINS
CONTINENTAL
IDAHO
R 21 E
R 22 E
May Creek
West Fork
Stevenson
Butler
Badger
Gory
Nickel
Bar Gul
Wenger
Ruby
Rabbit
Threemile
West
Nez Perce Cr
Trapper Gul
Ander
BM 6316 1925
BM 6224 1897
Ruby 8205
942
106
125
102
56
66
1247
945
079
KEY MAP
N
0
1
2
3 Miles
Scale

WEST BIG HOLE PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-942 Anderson Mountain	Gross Acres	Net Acres
1-942 Beaverhead	30,401	30,331
1-942 Salmon	18,281	18,120
Total	48,682	48,451

I. DESCRIPTION (Beaverhead National Forest)

The Anderson Mountain Roadless Area is shared by the Beaverhead National Forest in Region 1 and the Salmon National Forest in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The following information is specific to the Beaverhead National Forest portion of this roadless area. The detailed discussion of the Salmon National Forest portion of this roadless area immediately follows the Beaverhead discussion in this document.

The Anderson Mountain Roadless Area on the Beaverhead National Forest consists of lands in the Ruby, Butler, and May Creek drainages located in the Bitterroot Mountain Range along the Continental Divide. The country is varied with subalpine areas occurring along the Continental Divide and more heavily timbered slopes occurring at lower elevations. The landscape north of Ruby Creek is strongly dissected, with nearly all land in the sideslopes of deep v-shaped valleys. Valley bottoms are narrow, and ridgetops are narrow and slightly rounded. The area rises to steep, rugged peaks and rocky glacial cirque basins along the southern edge. It is a land of temperature extremes and deep snow. Elevations vary from 6300 feet along the Foothills road to over 8000 feet along the Continental Divide. The precipitation in the area is from 25 to 30 inches, 70 percent of which occurs as snow.

Soils in the northern two-thirds are moderately deep loams and sandy loams derived from fine-grained igneous rock. At the head of Ruby Creek, soils are mainly coarse sandy loams derived from granitic rocks.

Generally, the area is heavily timbered. The primary tree species are lodgepole pine with spruce occurring on the wetter sites. Douglas-fir and open sagebrush parks dominate the south slopes. Whitebark and limber pine grow on the high elevation ridges.

Current recreational uses of the roadless area include backpacking, trail machine riding, horseback riding, cross-country skiing, hunting and fishing.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Man's influence on the area's natural integrity has been minor. The impacts that exist are long-term in nature, but are limited to a small percentage of the land. To most visitors this roadless area would appear quite natural.

B. OPPORTUNITIES FOR SOLITUDE
Opportunities for solitude, primitive recreation, and challenging experiences are provided by the interesting topographical features and dense vegetation.

C. PRIMITIVE RECREATION OPPORTUNITIES
See above discussion.

D. OTHER FEATURES
There are no notable cultural or physical characteristics in this area.

E. MANAGEABILITY AND BOUNDARIES
Present boundaries on the Beaverhead side are manageable as they exist; however adjustments would be needed to exclude the May Creek campground, corridors for some roads, and private lands.

Beaverhead National Forest

1977 Inventory Acres:	30,600 gross	30,542 net
1983 Inventory Acres:	30,401	30,331
Change	- 199	- 211

Change in inventoried acres is due to acre recalculation done in the current Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-942 Bvhd VALUE	1-942 Salmon VALUE	COMBINED VALUE
Acres				
Gross	Acres	30,401	18,281	48,682
Net	Acres	30,331	18,120	48,451
Recreation				
Primitive	RVD's	380	0	380
SPNM	RVD's	554	0	554
SPM	RVD's	548	400	948
Roaded Natural	RVD's	*	800	800
Range				
Existing obligated suitable	Acres	1967	0	1967
Allotments	# of	2	0	2
AUM's	AUM's	947	0	947
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0

Resource Potentials (continued)

CATEGORY	UNIT	1-942 Bvhd VALUE	1-942 Salmon VALUE	COMBINED VALUE
Timber				
Tentative suitable	Acres	27,345	16,992	44,337
Standing Volume	MBF	151,942	94,900	246,842
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	34	0	34
Summer Habitat	Acres	*	18,120	18,120
Elk				
Winter Habitat	Acres	0	0	0
Summer Habitat	Acres	*	18,120	18,120
Deer				
Winter Habitat	Acres	0	0	0
Summer Habitat	Acres	*	18,120	18,120
Significant Fisheries				
Stream Miles	Miles	46.5	4.8	51.3
Stream Habitat	Acres	42.3	5.2	47.5
Lakes	# of	0	0	0
Lake Habitat	Acres	0	0	0
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	0	0	0
High	Acres	18,199	0	18,199
Moderate	Acres	12,132	18,120	30,252
Low	Acres	0	0	0
Claims	# of	75	50	125
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	30,331	0	30,331
Moderate	Acres	0	0	0
Low	Acres	0	18,120**	18,120
Oil and Gas Leases				
Leased area	Acres	8400	0	8400
Leases	# of	*	0	0

* Not Available

** Rating also includes uranium, geothermal and other energy resources.

1. Recreation

Recreation use associated with the Continental Divide National Scenic Trail is expected to increase as implementation of the Trail proceeds. Hunting use will likely increase as access to and within the unit improves. Snowmobiling is an increasingly popular winter use. Wood gathering is common in more accessible areas

2. Wildlife

The unit provides habitat for many wildlife species. Of primary importance to the public are big game species such as elk, mule deer, moose, mountain lion, and black bear. Upland game birds, such as spruce and blue grouse are also found in the unit. No threatened or endangered plant or animal species are currently known to inhabit the area. A wide variey of nongame wildlife species utilize the area, especially furbearer and raptor species.

Summer forage is provided throughout the unit for deer, elk, and moose. Except for some moose range in scattered willow bottoms, there is very little suitable big game winter range, and herds migrate into Idaho in the winter. May, Butler, and West Fork of Ruby Creeks are the major creeks in this area. The larger streams contain brook trout, and most of the streams in this area serve as spawning grounds for the brook trout fishery of the Big Hole drainage.

3. Water

Water quality in the vicinity of Anderson Mountain is high. Major streams within this unit serve as tributaries to the Big Hole River.

4. Livestock Operations

The roadless area contains about one-third of the grazeable land of one allotment and a minor portion of another allotment. There are approximately 55 miles of fence. The area serves two permittees and one grazing association, and provides grazing use for 745 cow/calf pairs and 28 horses. Rangeland is open sage and grasslands with moist bottomlands and grassland stringers at higher elevations.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of these areas are currently occupied by seral lodgepole pine stands ranging in age from 80-250 years. Engelmann spruce habitats are found in the area but are contained mostly in riparian and wet areas.

To date there are no known threatened and endangered plant species on National Forests and Grasslands according to Bob Gale, Northern Region T&E specialist. However, there are Botrychium paradoxum; Ophiograssaceae and Penstemon lemhiensis; Scrophulariaceae which may occur on or near Roadless Area 1-942.

6. Timber

Approximately 27,000 acres of the roadless area are commercial forest land. This land has approximately 152 million board feet of growing stock. Sites vary from poor to very good, with most of the area rating as average or above average for the Wisdom Ranger District lands.

Significant portions of two projected timber sales (Whistling Squirrel in 1989 and Ruby in 1990) lie within this area.

7. Minerals/Oil and Gas (Beaverhead NF portion only)
Geologic favorability for locatable minerals is high (60%) to moderate (40%). Numerous active mineral claims, mostly placer, occur along the southern fringe and several active claims are located in upper May Creek. Gold is the major important mineral to date, with heavy activity along Ruby Creek and Morgan Jones Lake. Geologic favorability for oil and gas is moderate. Some oil and gas leasing has occurred.

8. Cultural Resources
The potential for prehistoric cultural resources is unknown.

9. Land Use Authorizations
Land use authorizations include a special use road to Moosehorn Mine. A cabin in upper Butler Creek will revert ownership to the U.S. Government in the near future. There are also many miles of irrigation ditches in this area.

10. Non-Federal Lands
There are approximately 70 acres of non-Federal lands in this area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire occurrence is moderate.

2. Insect and Disease
An epidemic of mountain pine beetle in the 1930's and a long-term epidemic of dwarf mistletoe have killed over 60 percent of the mature lodgepole pine. Opened sites have regenerated to lodgepole pine and the beetle rating now is moderate to high. There is a potential for large fire with the buildup of downfall from bug infestation.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The Anderson Mountain Roadless Area is located approximately ten miles south of the Anaconda-Pintler Wilderness which receives light to moderate use, depending on the particular area. The roadless area is over 100 miles from the Lee Metcalf Wilderness Area.

The roadless area is located approximately 45 miles from Salmon, Idaho; 50 miles from Anaconda, Montana; 50 miles from Butte, Montana; 60 miles from Hamilton, Montana; 95 miles from Missoula, Montana; and 185 miles from Idaho Falls, Idaho.

2. Contribution to Wilderness Preservation System
This area would contribute geological/ecological diversity to the National Wilderness Preservation System. Low and mid-elevation grass and grass-sagebrush steepes with moderate topographical relief are

poorly represented in the System, particularly in the Northern Rocky Mountains.

3. Public Interest

During RARE I most of this area was inventoried as the Butler Roadless Area #46. The decision in the RARE I FEIS was to manage this area for nonwilderness resource development. It was not a controversial area during RARE I.

The Butler Roadless Area #46 was inventoried in RARE II as the Anderson Mountain Roadless Area #1-942. Through Land Management Planning for the 1978 Beaverhead Environmental Impact Statement and Forest Land Management Plan, the Anderson Mountain unit was evaluated for wilderness and, subsequently, recommended for nonwilderness uses. On conditional approval of this FEIS and Land Management Plan, the Anderson Mountain Roadless Area was removed from the RARE II inventory and from further consideration under the RARE II process. Public opinion expressed during the Forest planning process generally supported resource uses other than wilderness in this area.

Public response to the 1982 Roadless Area Evaluation revealed very little interest in a wilderness designation for this roadless area.

In response to the 1985 Revised Draft EIS and Proposed Plan Supplement, the Beaverhead Forest portion of the Anderson Mountain Roadless Area by itself drew little support for wilderness designation. However, there were some commentors, primarily those from Idaho, who supported designation of the combined Salmon-Beaverhead Roadless Area. They based their recommendation on wildlife and wilderness values. Other commentors, primarily those from the Big Hole Valley, opposed wilderness designation of this and other areas in the Big Hole. These commentors did not necessarily support development (timber harvest) in the area but, rather, expressed support for the lands surrounding the Big Hole Valley to remain "as is." Some commentors expressed support for timber harvest, where appropriate, in the area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Anderson Mt. Roadless Area (1-942)

Management Emphasis	Alternative (Net Acres) A CD	B	C	D	F	G	H*	I	W	S** PA
Salmon National Forest										
Wilderness:	0	0	15,919	15,919	0	0	0	18,120	0	
Nonwilderness	18,120	18,120	2201	2201	18,120	18,120	18,120	0	18,120	
Beaverhead National Forest										
Group 1: (Wilderness)	0	0	0	0	0	0	0	30,331	0	0
Group 2: (Timber)	26,691	21,838	27,601	303	26,084	16,986	22,142	0	27,298	15,131
Group 3: (High Range, High Range and Low Intensity Wildlife, No Timber)	0	0	0	0	0	0	0	0	0	0
Group 4: (Primitive/Semi-Primitive Recreation, Custodial)	3640	5763	0	30,028	3640	13,042	7886	0	2426	4738
Group 5: (High Range/High Wildlife, Mod/Low Range, Wildlife, No Timber)	0	2730	2730	0	607	303	303	0	607	10,462
BEAVERHEAD TOTAL:	30,331	30,331	30,331	30,331	30,331	30,331	30,331	30,331	30,331	30,331
SALMON TOTAL:	18,120	18,120	18,120	18,120	18,120	18,120	18,120	18,120	18,120	
ROADLESS AREA TOTAL:	48,451	48,451	48,451	48,451	48,451	48,451	48,451	48,451	48,451	48,451

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA; therefore only S is displayed.

Summary of Management Emphasis, Beaverhead Portion*

Management Emphasis	Alternative (Net Acres) A CD**	B	C	D	F	G	H	I	W	S PA***
Roaded:										
Decade 1	23,980	27,345	21,009	0	27,345	27,345	21,221	0	27,345	20,770
Decade 5 ****	30,331	30,331	30,331	0	30,331	30,331	30,331	0	30,331	30,331
Roadless:										
Decade 1	6351	2986	9322	30,331	2986	2986	9110	0	2986	9561
Decade 5 ****	0	0	0	30,331	0	0	0	0	0	0
Wilderness:	0	0	0	0	0	0	0	30,331	0	0

*** The Summary of Management Emphasis for the Salmon Portion of Roadless Area 1-942 is not displayed, because that Forest has not yet finalized its alternatives. Only the wilderness/nonwilderness question has been addressed. For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Salmon National Forest portion of Area 1-942, refer to the Salmon Impact discussion beginning on page C-451 of this document.**

**** CD is the Current Direction Alternative.**

***** PA is the Proposed Action Alternative.**

****** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.**

B. Impacts

(The following information is specific to the Beaverhead National Forest portion of this roadless area. For a detailed discussion of the impacts of wilderness, nonwilderness roaded, and nonwilderness roadless designation of the Salmon National Forest portion of this roadless area, see that Forest's report immediately following in this document.)

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Anderson Mt. Roadless Area (1-942) is designated wilderness in Alternative I only.

The wilderness qualities of the area would be maintained. The mototized use of the area, which is minor 4 X 4 travel near the private lane in Ruby Cr. near the Continental Divide, could be eliminated. Established trail systems could be used for foot travel to the places of interest in the area.

The 27,345 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 151.9 MMBF in standing volume. Sites vary from poor to good, with most as average on the Wisdom Ranger District. The predominant species is lodgepole pine.

Current livestock grazing, 947 AUM's, could continue on the portions of the 2 allotments involved but management practices may change. Presently, permittees use vehicles to some degree to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Summer forage and cover for big game species would not change much in the short-term period, because existing forage and good timber security levels would be maintained. Long-term changes might occur to various wildlife species depending on natural events within this roadless area and affect wildlife populations negatively or positively. Basically, wildlife habitat management would be accomplished through natural fire, and long-term effects would approximate a natural situation. Wildlife populations would vary, sometimes greatly.

Other nonpriced resource values are affected as follows:

Visual quality would be retained. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.

Wilderness designation would increase the land base in the Wilderness Preservation System and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Barring other factors such as fire, eventually a beetle epidemic may kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be large acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.

Water quality and fisheries quality in the tributaries to the Big Hole River would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest , the related industries would not be supported by this emphasis. Timber supply, Forest-wide, would drop, resulting in a loss of jobs and income. The service sector, including outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would continue to be in a roadless setting.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 75 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 8400 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Anderson Mt. Roadless Area (1-942) are assigned these emphases in all Alternatives except I; from 50 percent in Alternative S (the Proposed Action) to 91 percent in Alternative C. Alternative D assigns less than 1 percent to these management emphases.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal requires the construction of permanent roads and modifies the natural appearance of the area for approximately 25 to 40 years (or until the regeneration is high enough to hide the scars and present the appearance of an old burn). The stumps and incompletely burned slash piles would be long term onsite evidence of man's activities. The cutting units themselves would be impacts potentially visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention along the southside of Joseph and Trail Creeks, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities. as apparent from Highway 43. This will be difficult to achieve on the initial entry.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit in the southern half of the area by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing construction and maintenance maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.

In areas where visual quality objectives are retention or partial retention along the south side of Joseph and Trail Creeks, impacts will be evident but less severe than those created by more intensive timber management activities.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions. Access into the area for hunting will improve, however, the roadless setting will be altered.

The degree of elk security cover losses will relate to the magnitude of the timber harvest in the area. Roads constructed will have more of an effect on elk security and these are conduit for hunters to access an area, whether or not vehicle travel is permitted.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.

In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units or units imitations,large natural openings on the north side of the highway be required.Harvest will favor seral stands of lodgepole pine. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphases: Range (No Timber, High Intensity Range, and High Intensity Range with Lowh Intensity Wildlife)

There are no acres assigned these emphases under any alternative.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

Portions of the Anderson Mt. Roadless Area (1-942) are assigned these prescriptions in all Alternatives except C and I; from as little as 8 percent in Alternative W to 99 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and susceptible to mountain pine beetle. Barring other natural events, such as fire, eventually a beetle epidemic may kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations and other local recreational service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Small portions of the Anderson Mt. Roadless Area (1-942) are assigned these prescriptions in Alternatives B, C, F, G, H, and W; from 1 percent in Alternatives G and H to 9 percent in Alternative B. Alternative S, the Proposed Action, assigns 34 percent to these prescriptions.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and longest-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area to a minor degree. The number of such developments could be expected to increase. The number of roads (unimproved wheeltracks) also could be expected to increase.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to

other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

APPENDIX C - ROADLESS AREA EVALUATION
Salmon National Forest

Roadless Area Name: 13942 Anderson Mountain	Gross Acres	Net Acres
Beaverhead National Forest	30,401	30,331
Salmon National Forest	18,281	18,120
Total	48,682	48,451

I. DESCRIPTION (Salmon National Forest)

The Anderson Mountain Roadless Area is shared by the Beaverhead National Forest in Region 1 and the Salmon National Forest in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The Anderson Mountain Roadless Area is approximately 30 air miles north of Salmon, Idaho. The area is bounded on the east by the Continental Divide which is the Idaho-Montana state boundary; on the south by a road along Dahlonega Creek (079) and by a road along Threemile Creek; on the west by a ridge between Anderson Creek and Crone Gulch, by the ridge between Crone Gulch and Pierce Creek and by Highway 93. Access to the area can be gained from Highway 93, from the ridge road to Anderson Mountain, and from the road along Dahelonga Creek.

The southern portion is dissected by Anderson Creek, Nez Perce Creek and Threemile Creek. Pierce Creek drains the northern portion. Elevations range from about 4,600 feet near Gibbonsville, to over 8,000 feet at Anderson Mountain. Slopes are between 30 and 70 percent throughout most of the area. This area contains neither cirque basins nor lakes. Average annual precipitation of 30 to 35 inches occurs mostly as snow and spring and fall rains. Summer highs of 80 to 90 degrees at the low elevations are contrasted by winter lows of 35 to 40 degrees below zero at the higher elevations. Quartzites bedrock forms the sandy loam to loamy sand textured soils.

Much of the area is timbered by Douglas-fir, with ponderosa pine occurring on the hotter-drier sites and lodgepole pine and subalpine fir occurring at the higher elevations. Engelmann spruce is found in creek bottoms and on wet sites. Open, grassy, dry-land meadows are scattered throughout the higher elevational areas. The ecosystems found in the area are western spruce-fir and grand fir/Douglas-fir.

Current recreation use includes backpacking, trail bike riding, horseback riding, cross-country skiing,and hunting. Use was estimated at approximately 1,200 RVD's in 1982.

Anderson Mountain Roadless Area is contiguous with roadless area #01942 (Beaverhead NF) on the east and north and is bordered by lands that have been intensively managed for timber harvest on the west and south.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Man's influence on the area's natural integrity has been minor. The impacts that exist are long-term in nature, but are limited to a small percentage of the land. The scenery is considered common for the Salmon National Forest. To most visitors this roadless area would appear quite natural.

B. OPPORTUNITIES FOR SOLITUDE

The area provides only moderate opportunities for solitude. The vegetative screening is dense, but the topographic screening is moderate. The distance from the perimeter to the core rates as moderate and there are some permanent off-site intrusions. The size of the unit rates as low potential, contributing to the overall rating for solitude as moderate.

C. PRIMITIVE RECREATION OPPORTUNITIES

The opportunity for primitive recreation is high due to vegetation, diversity, and lack of recreation facilities. Opportunities would include hiking, hunting, camping, cross-country skiing and horseback riding. The opportunity for challenging experiences or encountering serious hazards is rare.

D. OTHER FEATURES

There are no remarkable topographical, geographical, or cultural feautres in this roadless area.

E. MANAGEABILITY AND BOUNDARIES

Logical and manageable boundaries could be developed for this roadless area. Timber sale activities have occurred in the southwest corner. The area impacted by these activities no longer meet roadless area criteria and this portion of the roadless area will not be considered further for wilderness.

Salmon National Forest

1977 Inventory Acres:	18,340	18,340
1983 Inventory Acres:	18,577	18,120
Change	+ 237	- 220

Change in inventoried acres is due to acre recalculation done in the current Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-942 Salmon VALUE	1-942 Bvhd VALUE	COMBINED VALUE
Acres				
Gross	Acres	18,281	30,401	48,682
Net	Acres	18,120	30,331	48,451
Recreation				
Primitive	RVD's	0	380	380
SPNM	RVD's	0	554	554
SPM	RVD's	400	548	948
Roaded Natural	RVD's	800	*	800
Range				
Existing obligated suitable	Acres	0	1967	1967
Allotments	# of	0	2	2
AUM's	AUM's	0	947	947
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0
Timber				
Tentative suitable	Acres	16,992	27,345	44,337
Standing Volume	MBF	94,900	151,942	246,842
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	0	34	34
Summer Habitat	Acres	18,120	*	18,120
Elk				
Winter Habitat	Acres	0	0	0
Summer Habitat	Acres	18,120	*	18,120
Deer				
Winter Habitat	Acres	0	0	0
Summer Habitat	Acres	18,120	*	18,120
Significant Fisheries				
Stream Miles	Miles	4.8	46.5	51.3
Stream Habitat	Acres	5.2	42.3	47.5
Lakes	# of	0	0	0
Lake Habitat	Acres	0	0	0

Resource Potentials (continued)

CATEGORY	UNIT	1-942 Salmon VALUE	1-942 Bvhd VALUE	COMBINED VALUE
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	0	0	0
High	Acres	0	18,199	18,199
Moderate	Acres	18,120	12,132	30,252
Low	Acres	0	0	0
Claims	# of	50	75	125
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	30,331	30,331
Moderate	Acres	0	0	0
Low	Acres	18,120**	0	18,120
Oil and Gas Leases				
Leased area	Acres	0	8400	8400
Leases	# of	0	*	0

* Not Available
** Rating also includes uranium, geothermal and other energy resources.

1. Recreation

Recreation use associated with the Continental Divide National Scenic Trail is expected to increase as implementation of the Trail proceeds. Hunting use will likely increase as access to and within the unit improves.

2. Wildlife

This large area of key elk summer range includes a significant portion of the migration corridor that is used by elk and mule deer herds that primarily summer in Montana and winter in Idaho. Wet meadows in the heads of Anderson, Smithy, and Threemile Creeks and abundant dry meadows in Pierce and Nez Perce Creeks contribute to a near optimum cover/forage ratio for big game, as well as overall wildlife diversity.

Four streams within this area are known to have trout. Habitat characteristics are representative of small, moderate-to-high gradient streams. Habitat condition would be rated as good to excellent. Game fish species present include rainbow, cutthroat, and bull trout. Fishing use of the streams is rated as light, with fishing quality fair.

3. Water

The headwaters of two major streams tributary to the North Fork of the Salmon River are located below the Continental Divide. The headwaters of Pierce Creek and Dahlonega Creek produce excellent water quality.

4. Livestock Operations

Except for a small amount of recreational horse use, this roadless area is not grazed by domestic livestock.

5. Ecology

The area does not contain any ecosystems determined from RARE II to be in need of representation in the wilderness system.

6. Timber

In this roadless area there is an estimated 94.9 million board feet of sawtimber growing stock volume with an estimated potential annual yield of 0.9 million board feet per year. One existing intrusion has resulted from a trespass timber harvest in 1979. A five million board feet timber sale is proposed for fiscal year 1985 in the southwest part of the Salmon area.

7. Minerals/Oil and Gas

The hardrock mineral potential of the area was rated as unknown in the RARE II evaluation, and no new data modifies the original rating. Gold and copper occur within this area. Mining claim owners continue to do assessment work, with some expanding their claim activity. The roadless area currently contains no active mining operations. There is no known potential for currently leasable minerals.

8. Cultural Resources

The potential for prehistoric cultural resources is considered moderate. Historic structures are known to exist, but their significance has not been evaluated.

9. Land Use Authorizations

Part of the Keating Outfitter and Guide permit area is within the roadless area. Approximately 1.5 miles of System road are within the perimeter of the roadless area. In addition, the area includes 8.37 miles of the Continental Divide Trail and 16.53 miles of System Trail. A trail easement is needed for 1.4 miles of System Trail on private land. Within the planned intrusion are 7.75 miles of proposed System road. Trail easements are needed across private lands within the intrusion for 1.13 miles of System Trail.

10. Non-Federal Lands

There are private lands within the intrusion in Anderson Creek, and at the forks of Dahlonega and Nez Perce Creeks. These areas total 100 acres and 61 acres, respectively.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire occurrence is moderate.

2. Insect and Disease

As the lodgepole pine increase in diameter, there is an increasing hazard of a major mountain pine beetle epidemic. However, many lodgepole stands have slow growth due to dwarf mistletoe or overstocking. Western spruce budworm is periodically killing some of the understory Douglas-fir, especially on the drier sites. Occasionally, the tops of the larger trees are killed. The Douglas-fir beetle periodically kills small groups of the older, larger Douglas-fir. Dwarf mistletoe is causing serious deterioration in some Douglas-fir stands

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The Anderson Mountain Roadless Area is located approximately 55 road miles from the River of No Return Wilderness. Use of this wilderness ranges from low to high, depending on the particular area.

The Roadless Area is located approximately 45 miles from Salmon, Idaho; 50 miles from Anaconda, Montana; 50 miles from Butte, Montana; 60 miles from Hamilton, Montana; 95 miles from Missoula, Montana; and 185 miles from Idaho Falls, Idaho.

2. Contribution to Wilderness Preservation System

The area does not represent any unique ecosystem.

3. Public Interest

During RARE I this area was inventoried as the Anderson-Nez Perce Roadless Area #290. The decision in the RARE I FEIS was to manage this area for non-wilderness resource development. Public opinion was in general agreement that the area should not be studied further for wilderness. It was not a controversial area during RARE I.

The Anderson-Nez Perce Roadless Area #290 was inventoried and evaluated in RARE II as the Anderson Mountain Roadless Area #04942. The decision in the RARE II FEIS was to manage this area for nonwilderness resource development. Public opinion was in general agreement that the area should not be studied further for wilderness. It was not a controversial area during RARE I.

Senator McClure (Idaho) held "Idaho Forest Management Act" hearings in Coeur d'Alene, Lewiston, Boise, and Idaho Falls in August 1983. Prior to the meetings, the Senator sent out a constituent letter with four proposals, i.e., the Forest Service RARE II, Forest Industries, other commodity user groups, and the 1979 Idaho Wildlife Federation proposal. Following the hearings, Senator McClure received additional input from the environmental groups and the Governor of Idaho. Neither group made any special recommendation on this area. However, the Idaho Department of Fish and Game provided input to Governor Evans (Idaho) and recommended further planning for this area. The issue at hand in this case is roadless management to provide for an interstate migratory elk herd rather than wilderness. It is expected that this will be an issue as the Forest Plan develops.

The Anderson Mountain Roadless Area is contiguous to roadless lands on the Beaverhead National Forest in Montana. The wilderness/nonwilderness issue has not been highly controversial on the Beaverhead.

During the Forest Planning review of inventoried roadless lands, public opinion was again divided ranging from no wilderness to all wilderness. The Idaho Wildlife Federation (IWF) and Idaho Outfitters and Guides Association (IOGA) recommended a "Reserved" status for the area which is basically development only if it can be done without impairing environmental values. The Idaho Environmental and the Idaho Fish and Game Commission recommended wilderness for the entire area. The Idaho Mining Association, Idaho Cattlemen's Association, Outdoors Unlimited, Idaho Farm Bureau, Idaho Wool Growers, Idaho Trail Machine Association, Idaho Forest Industries Council, and Idaho Women in Timber all recommended no wilderness for Anderson Mountain. No specific recommendation was received from Governor Evans or the Idaho Wildlands Defense Coalition. The wilderness/nonwilderness issue on Anderson Mountain generated a moderate level of controversy during Forest Plan review of roadless areas.

Senator McClure has introduced the Idaho Forest Management Act in the Senate. The Anderson Mountain Roadless Area was not included in this proposed wilderness legislation.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Prescription Assignment by Alternative for the Salmon portion of the Roadless Area.

Alternatives	Wilderness	Non-Wilderness Roaded	Unroaded
1	0	18,120	0
2	0	18,120	0
3	0	0	18,120
4	0	18,120	0
5	0	18,120	0
6	0	18,120	0
7	0	18,120	0
8	15,919	0	2201
9	15,919	0	2201
10	15,919	2201	0
11	18,120	0	0
12	0	9060	9960

(There will be a detailed discussion of these alternatives in the Salmon National Forest Draft EIS when that document is published.)

B. Impacts

The following information is specific to the Salmon National Forest portion of this roadless area. The detailed discussion of the Beaverhead National Forest portion of this roadless area immediately precedes the Salmon discussion in this document.

1. Designation: Wilderness
Management Prescription: Wilderness

A wilderness management prescription was considered on 15,919 acres in Alternatives 8, 9, and 10, and on 18,120 acres (all of the area) in Alternative 11.

Wilderness designation would enhance the recreation opportunities of those visitors seeking a non-motorized wilderness type experience. It would curtail, however, the opportunities of those visitors who desire to use motorized means, primarily trail bikes, to access the area.

Under this prescription, recreation use would continue to be dominated by big game hunting.

The Recreation Opportunity Spectrum classification for that portion designated wilderness would be Semi-Primitive Non-motorized.

Visual Quality would be preserved in those portions designated wilderness.

The habitat potential for elk summer range will be approximately 84 animals. Mule deer habitat potential will be approximately 140 animals. With wilderness management, the migration route for the interstate elk herd will retain its full value.

Fish production would be similar in Alternatives 8, 9, and 10. Production potentials would be at or above the levels necessary to meet State goals.

Alternative 11 would allow habitat to function at natural levels. Production potential would be at its highest natural level.

As noted in Section III, with the exception of a small amount of recreation horse use, most of which occurs during the big game hunting season, the area is not grazed by domestic livestock. Wilderness management would have no effect on domestic livestock use of the area.

Wilderness would be designated in all or parts of the roadless area in Alternatives 8, 9, 10, and 11. In Alternative 11 all of the tentatively suitable timberland would be designated wilderness. In Alternatives 8, 9, and 10, approximately 88 percent of the tentatively suitable timberland would be designated in wilderness and would become unavailable for harvest. Approximately 14,920 acres of tentatively suitable timberland and 83 million board feet of standing volume would become not available in alternatives 8, 9, and 10, and 16,992 acres with approximately 94.9 million board feet of standing volume in Alternative 11 would become unavailable. These volumes could not be made up elsewhere and their loss would result in a downward adjustment of the Forest allowable sale quantity.

In Alternatives 8, 9, 10, 15,919 acres of moderate potential mineral lands would be unavailable for development, except for the possibility that some or all of the 32 existing mining claims proved to merit development. In Alternative 11, 18,120 acres of moderate potential mineral lands would be unavailable for development, except for the possibility that some or all of the 50 existing mining claims proved to merit development.

2. Designation: Non-wilderness
   Management Prescription: Non-wilderness/Roaded

   Non-wilderness roaded management was considered for the entire area (18,120 acres) in Alternatives 1,2,5,6, and 7, and 9060 acres for Alternative 12, and 2201 acres in Alternative 10.

   Recreation use would continue to be dominated by big game hunting although actual numbers of animals may decline resulting in less success.

   The Recreation Opportunity Spectrum classification would be Roaded Natural.

   Visual Quality would primarily be modification/maximum modification with lesser amounts of partial retention.

   Elk habitat potential on the summer range could drop to as low as 17 animals dependent on how rapidely the area was developed. Intrusions would occur on the interstate elk herd migration route. Summer elk habitat potential for Alternative 12 would be approximately 50 elk.

Alternatives 1, 4, 6, 7, and 12 would have similar fish production potentials. Management goals will include meeting State objectives. Production objectives would be at least 80 percent of potential.

Alternatives 2 and 5 would provide the greatest potential impacts to resident fish production. MBVP would be the minimum management level. Activity and development under this alternative could effect resident and anadromous fish production in off-area habitats.

Timber harvest activities would occur on three sales within the first decade. These sales are scattered over the area and areas impacted would no longer meet unroaded criteria. By the fifth decade sale, activity woulld have occurred over most of the suitable timberlands and the wilderness opportunity would be foregone.

The entire area would remain open for mineral development.

3. Designation: Non-wilderness
Management Prescription: Non-wilderness/Unroaded

Non-wilderness unroaded management was considered for the entire area in Alternative 3, 2201 acres in Alternatives 8 and 9, and 9060 for Alternative 12.

Recreation use would continue to be dominated by big game hunting. The Recreation Opportunity Spectrum classification would be Semi-Primitive Motorized, allowing for all current uses such as trail bike riding.

Visual Quality would be retained in those portions assigned to unroaded management.

Elk habitat potential would be approximately 84 animals and the interstate elk migration route would remain undisturbed in Alternative 3. The unroaded areas in Alternatives 8 and 9 would be "in addition to: the wilderness so big game conditions would remain unchanged. Summer elk habitat potential for Alternative 12 would be approximately 50 animals. Some negative impacts on elk which use this area as a migration route could also be expected under Alternative 12.

Alternative 3 would be expected to result in fish production levels similar to the all wilderness alternative. Habitat effectiveness would be at natural levels.

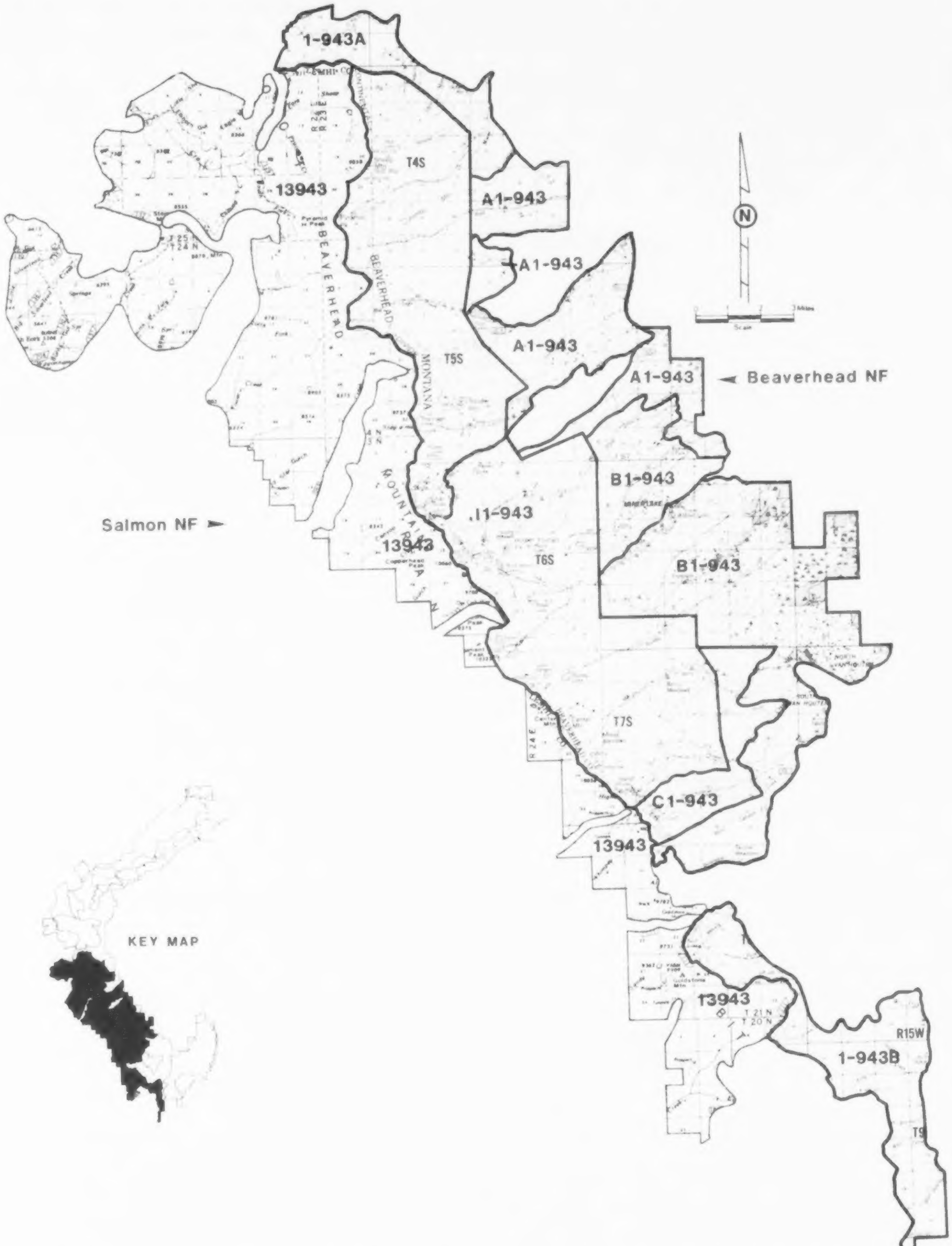
As noted in Section III, with the exception of a small amount of recreation horse use, most of which occurs during the big game hunting season, the area is not grazed by domestic livestock. This situation would not change under this management prescription.

Unroaded management would be designatd on 2201 acres of suitable timberland in Alternatives 8 and 9, and approximately 8,750 acres in Alternative 12. Timber harvest would only be carried out in unroaded areas from outside the area or by aerial means. No harvest would occur in the first decade, but harvest would be carried out between the second and fifth decades. Since no roads would be constructed, the timber harvest, by itself, would not have long term effects on wilderness attributes.

Mineral values would continue to be available.

ROADLESS AREA 1-943

WEST BIG HOLE


1-943A
13943
T4S
A1-943
N
A1-943
A1-943
A1-943
Beaverhead NF
BEAVERHEAD
BEAVERHEAD
MONTANA
T5S
B1-943
B1-943
Salmon NF
I1-943
T6S
13943
T7S
C1-943
13943
KEY MAP
13943
R15W
1-943B
T9

WEST BIG HOLE PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-943 West Big Hole	Gross Acres	Net Acres
1-943A (Beaverhead)	6,626	6,626
1-943B	13,760	13,760
A1-943	18,244	17,401
B1-943	33,939	31,707
C1-943	6,209	6,202
I1-943	55,199	55,087
13943 (Salmon)	81,118	81,068
Total	215,095	211,851

The West Big Hole Roadless Area is shared by the Beaverhead National Forest in Region 1 and the Salmon National Forest in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

Although the X1-943 Roadless Area is being evaluated in total for wilderness potential, there has been historical controversy that relates more to one portion of the West Big Hole Roadless Area. To address specific points in the controversy, to facilitate analysis, and to address opportunities for management, the Roadless Area has been "divided" into several parts. Two of these, areas A and I1-943 correspond to the units that were evaluated and recommended for nonwilderness and wilderness, respectively, in the RARE II process. The additional X1-943 numbers identify portions of the roadless area that were assigned to nonwilderness uses in the 1978 Beaverhead National Forest Final EIS and Forest Plan and dropped from the RARE II process. These areas, which remain roadless under RARE II criteria, are again being evaluated for wilderness in the current planning process.

The Salmon National Forest portion of Area X1-943 is discussed immediately after this explanation of the Beaverhead portion.

I. DESCRIPTION (Beaverhead National Forest)

Area 1-943A is located at the headwaters of Pioneer, Cow, Ruby, Big and Little Moosehorn and Moose Creeks in the Bitterroot Mountain Range. The Continental Divide forms its eastern boundary. It is a thin sliver of land one and one-half miles wide and eight miles long, lying along the northern edge of I1-943, characterized by rolling glacial moraine and long, gently sloping unglaciated ridges. It contains deep "U" canyons and is strongly dissected by many drainages. Elevations range from 7,000 to 8,300 feet.

Directly below this area is A1-943 that includes four scattered tracts between Rock Creek on the north and Miner Creek on the south. All are situated between the Forest boundary and area I1-943. Access is from Highway #278 and Forest roads #945.1, 2, and 3. This area is on the lower slope foothill country on the east side of the Continental Divide along the Bitterroot Mountains. Rock Creek, Dry Creek, Sawmill Creek and Little Lake Creek are major drainages through the area. Broad, gently sloping glacial outwash fans occur along the Forest boundary on the west. The area is strongly dissected by many drainages forming both "U" and "V" canyons.

Area B1-943 extends from Little Lake Creek on the north to Darkhorse Creek and the Big Hole River on the south. It is geographically situated between the Forest boundary on the east and areas C1-943 and I1-943 on the west. Access is via Highway #278 and Forest roads #181 and #182. This is the lower slope foothill country on the east side of the Continental Divide along the Bitterroot Mountains. Little Lake Creek, Gravelle Creek, Miner Creek, Englejard and Hamby Creeks are major drainages. It is generally very rolling country with broad U-shaped canyons and wet, marshy potholes. The southern tip is more strongly dissected and contains steeper canyons (Blind Canyon). Broad, nearly level glacial outwash fans occur along the Forest boundary.

Area C1-943 is located along the southeast edge of I1-943 and west of Van Houten Lake. It includes the headwaters of Jahnke Creek and part of the Pioneer and Berry Creek drainages. Access is obtained from Highway #278 and Forest road #181. The terrain is lower slope foothill country on the north around Berry and Pioneer Creeks to high subalpine country at the head of Jahnke Creek on the south. Jahnke Canyon is a deep V-shaped canyon. Elevations range from 7,000 to over 9,000 feet.

Area 1-943B forms the extreme southern tip of the West Big Hole Planning Unit, reaching as far south as Lemhi Pass. The Continental Divide forms the western boundary and Bloody Dick Creek flows along the east of this area. The floodplain of the main Bloody Dick Creek is fairly wide, and bounded by short, steep streambanks. Access is provided by the Bloody Dick road.

Except for mountain meadows and grassy parks along the stream bottoms, the vegetative cover is mostly lodgepole pine and Douglas-fir with small amounts of spruce and alpine fir. Lodgepole pine, the major species, averages over 100 years old and is heavily infested with mistletoe. Mountain pine beetle killed 50 to 75% of the pine during the 1920's. The average age of all species is 100 to 200 years old or more. Only 5% of the growing stock is under 40 years old. Mature lodgepole pine averages 9 inches in diameter. Sites vary in potential from less than 20 to 60 cuft/ac/yr. Along the Forest boundary are several open areas of dryland range. Area C1-943 contains some marsh willow bottoms.

Area I1-943 is located along the east side of the Continental Divide which forms its boundary on the west. Big Moosehorn Creek is on the northern edge and Pioneer Creek is on the south. The east boundary of this area is approximately midway between the Continental Divide and the Forest boundary. The Continental Divide extends from the extreme northern tip, along the western border, to the southern end. It is a very highly scenic area of the Big Hole Valley. Some terrain contains high mountain peaks and glacial basin lakes which lie above timberline. The area contains scattered snowfields yearlong. More than 30 percent of this area has little vegetative cover. It is one of the highest water producers on the Forest and water quality is very high. Vegetation on the mid-elevation slopes toward the eastern half is mostly forest, with lodgepole pine and Douglas-fir on the drier sites, and Engelmann spruce and subalpine fir on moist sites.

Soils on the unglaciated ridges are deep loams and fine sandy loams derived from metamorphic rock, mainly quartzites. Soils on the glacial moraines are very stony, sandy loams. Shallow, gravelly, sandy loams occur along the Forest boundary (1-943A and A1-943). In Area I1-943, soils are generally shallow, weakly developed loamy sands and sandy loams with fragmental or sandy-skeletal particle size classes. Deep, poorly drained loams and sandy loams occupy the meadows scattered throughout B1-943 and C1-943. Dark colored sandy loams occur on the footslopes along the Forest boundary in the eastern third of 1-943B.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Area 1-943A is tending to lose its natural integrity from concentrated areas of post and pole cutting, previous jeep trails and present activity from placer mining sites. There are also disturbances at Cow and Pioneer Creeks that impair the appearance. The area is heavily timbered.

Area 1-943B--activity from adjacent timber sales and roads (Bloody Dick Timber Sale) has affected the natural quality of this area visually and has also reduced its size. Post and pole cutting occurs within the unit. A more primitive nature is encountered in the upper extremities of Eunice Creek and Park Creek.

Area A1-943, from a distance, appears quite natural, but the impacts of man are apparent in the interior of the unit. There is significant activity in gold, silver, lead and molybdenum mining, and exploration is occurring in the Rock Creek vicinity. Post and pole cutting is also a common use here and old jeep trails are still visible. Portions of this area north of Little Lake Creek are intensively used by domestic livestock. Many small timber sale operations are presently disturbing the area. The natural integrity is fair, except for several jeep trails and a north-south running dozer firebreak from Little Lake Creek to Englejard Creek. Past timber cutting units are present in most drainages. The Silver Ridge Mine, which produced in 1983, is located within the area. Development activities are plentiful surrounding the area. The most prominent natural feature is Twin Lakes, with a surface area of 75 acres.

Area B1-943 has as one of its most notable natural features the frequent occurrence of glacial potholes. There is also a large natural sagebrush acreage at Gravelle Park. Disturbances include a 20-year-old dozed fireline about 50 to 100 feet wide and primitive jeep trails up Hamby, Pioneer and Berry Creeks. A Forest administrative site exists at Miner Lake.

Area C1-943--the only impacts of this area are jeep trails to the Jahnke Mine and patented mining claims at Jahnke Lake. Otherwise, this timbered region appears quite natural.

Area I1-943 provides the most primitive and natural-appearing characteristics of any of 1-943 due in part to the vastness of the region (it is contiguous with a large area on the Salmon Forest), the high alpine setting, and the number of sizeable mountain lakes. Impacts of human activity are confined primarily to areas around the Ajax and Silver Ridge Mines although there are some minor disturbances of old jeep trails and cabins scattered throughout its entirety. The entire region appears natural to visitors and the natural integrity is still excellent.

B. OPPORTUNITIES FOR SOLITUDE

Area 1-943A's thick timber provides a buffer from visible disturbances, but noises from adjacent private lands and traffic on the Ruby Creek road lessen solitude atmosphere.

Area 1-943B has dense timber growth that adds to its opportunitiy for solitude; but its narrow size discourages the visitor seeking primitive experiences. Noise from an adjacent timber sale and roads surrounding the area are also distractions. A more remote feeling exists in the upper regions of Eunice and Park Creeks.

Area A1-943 provides a fair opportunity for solitude because of its timber growth. Activity around the Twin Lakes campground and the approaching traffic reduce the solitude qualities. Sounds are also audible from the Silver Ridge mining operations.

Area B1-943--the quality of solitude for this portion of the West Big Hole is high here because of the general size, topography, and timber that provides screening. Activity around the heavily used Miner Lake area creates some disturbance.

Area C1-943 provides a fair opportunity for solitude. There is an old jeep trail to Jahnke Lake and Mine. This unit's remoteness would be enhanced if considered with the surrounding areas.

Area I1-943 is the most scenic and remote of the 1-943 regions, in a high alpine setting. Opportunities for solitude are excellent because of the area's rugged peaks, cirque basin lakes, vegetative screening and elevations above timberline. The only disturbance is the road in the vicinity of the Ajax and Silver Ridge Mines which is now under development.

C. PRIMITIVE RECREATION OPPORTUNITIES

Area 1-943A limits the primitive recreation opportunities because of its narrowness, which causes virtually the entire acreage to fail to meet the primitive criterion of remoteness. The area is less than two miles at its widest point. Primitive and semiprimitive uses do occur here, with hunting, fishing, hiking and camping the most common.

Area 1-943B has hiking trails and it is used occasionally for hunting, but generally due to its narrowness, is not notable for primitive experiences.

Area A1-943--the majority of recreation activities in A, B and C1-943 are considered to be of semiprimitive motorized nature. All portions of these areas are too close to roads, campgrounds, mines or other developments to meet the primitive recreation criterion. The greatest use occurs during hunting season.

Area I1-943 provides a wide range of primitive and semiprimitive recreation. It is rugged and remote with limited access which encourages more active participation in primitive activities such as rock climbing, hiking, backpacking, nature appreciation, horseback riding or fishing. The greatest level use occurs during summer and through hunting season.

D. OTHER FEATURES

Area B1-943's glacial potholes are geological features that are unique.

Area I1-943 is traversed on the west boundary by the proposed Continental Divide Trail. Some segments of this trail are completed. The area is particularly high in scenic values. There is a historical mill site directly below Ajax Lake.

E. MANAGEABILITY AND BOUNDARIES

About one-third of Area 1-943A, or the perimeter that is not adjacent to I1-943, is unmanageable or at least difficult to manage. The area is now small and would require numerous boundary adjustments to mitigate the effects of development. Most intrusions could be eliminated by boundary adjustments but would remove the area as a viable wilderness candidate.

Area 1-943B--a boundary has been delineated to exlude a timber sale on the west edge which is difficult to define on the ground because of the dense timber cover. Any further modifications may threaten the integrity of the area because of its extremely narrow nature.

Area A1-943 has portions north of Little Lake Creek that are intensively used by domestic livestock. Many small timber sale operations are presently disturbing the area. The natural integrity is fair, except for several jeep trails and a north-south running dozer firebreak from Little Lake Creek to Englejard Creek. Past timber cutting units are present in most drainages. The Silver Ridge Mine, which produced in 1983, is located within the area. Boundary modifications could exclude the conflicts without detracting from wilderness values.

Area B1-943's north and southwest boundaries that abut C1-943 are presently difficult to define and manage on the ground. Size is sufficient that, even with boundary modifications, the acreage could still be considered as a viable wilderness.

Area C1-943 is small and about one-half the boundary that adjoins I1-943 is difficult to manage. If boundaries were adjusted to be defineable, the area may become too small to be managed for wilderness values.

Area I1-943's east boundary may be difficult to define and post; areas of mining disturbance could be mitigated by a boundary change. Size is adequate to consider this unit as a wilderness area. Corridors that extend into the mines and the mine claim groups would have to be deleted. Special use roads are now authorized into Ajax Mine and Silver Ridge Mine (A1-943).

Beaverhead National Forest

1977 Inventory Acres:	111,286 gross	109,383 net
1983 Inventory Acres:	133,977	130,783
Change	+ 22,691	+ 21,400

Reasons for Inventory Change:

Timber Sale and Roads	- 7180	- 7180
Mineral Activity and Roads	- 952	- 952
Addition of Unit Plan	+ 28,961	+ 26,699
Acreage Recalculation	+ 1862	+ 2833

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-943A VALUE	1-943B VALUE	A1-943 VALUE	B1-943 VALUE	C1-943 VALUE	I1-943 VALUE	13943Salm. VALUE	COMBINED VALUE
Acres									
Gross	Acres	6626	13,760	18,244	33,939	6209	55,199	81,118	215,095
Net	Acres	6626	13,760	17,401	31,707	6202	55,087	81,068	211,851
Recreation									
Primitive	RVD's	84	171	68	124	24	695	0	1166
SPNM	RVD's	122	249	96	175	34	1013	0	1689
SPM	RVD's	121	246	102	185	35	1002	2700	4391
Roaded Natural	RVD's	*	*	*	*	*	*	200	200
Range									
Exist. obligated suit.	Acres	858	1631	3560	8240	1617	1039	2250	19,195
Allotments	# of	2	3	4	3	1	5	6	15**
AUM's	AUM's	354	716	1376	2814	433	381	450	6524
Exist. vacant suit.	Acres	0	0	0	0	0	0	0	0
Allotments	# of	0	0	0	0	0	0	0	0
Proposed suitable	Acres	0	0	0	0	0	0	2250	2250
AUM's	# of	0	0	0	0	0	0	450	450
Timber									
Tentative suitable	Acres	6248	11,041	14,251	21,393	4104	19,941	22,976	99,954
Standing Volume	MBF	34,915	65,083	81,158	118,936	24,419	109,032	113,600	547,143
Corridors									
Existing/Potential	# of	0	2	0	0	0	0	0	2
Wildlife T&E									
Bald Eagle	Acres	0	0	0	0	0	0	0	0
Gray Wolf	Acres	*	*	*	*	*	*	80,741	80,741
Big Game									
Winter Habitat	Acres	1817	1251	4397	8506	967	26,270	21,120	64,328
Summer Habitat	Acres	*	*	*	*	*	*	81,618	81,618
Elk									
Winter Habitat	Acres	0	0	0	0	0	0	21,120	21,120
Summer Habitat	Acres	*	*	*	*	*	*	81,618	81,618
Deer									
Winter Habitat	Acres	0	0	0	0	0	0	15,000	15,000
Summer Habitat	Acres	*	*	*	*	*	*	81,618	81,618
Significant Fisheries									
Stream Miles	Miles	9.0	16.1	20.0	40.2	8.7	53.8	15.5	163.3
Stream Habitat	Acres	6.7	7.5	18.0	29.6	4.8	21.8	23.2	111.6
Lakes	# of	5	0	29	72	8	75	4	193
Lake Habitat	Acres	6	0	122	197	24	492	11	852
Water Developments									
Existing	# of	1	0	0	0	0	1	0	2
Minerals									
Very High	Acres	3976	4128	8701	0	2047	38,569	0	57,421
High	Acres	0	0	0	0	0	0	81,068	81,068
Moderate	Acres	2650	9632	8700	31,707	4155	16,518	0	73,362
Low	Acres	0	0	0	0	0	0	0	0
Claims	# of	27	18	62	4	10	110	214	445
Oil and Gas Potential									
Very High	Acres	0	0	0	0	0	0	0	0
High	Acres	0	0	0	0	0	0	0	0
Moderate	Acres	6626	13,760	17,401	31,707	6202	55,087	0	130,783
Low	Acres	0	0	0	0	0	0	81,068***	81,068
Oil and Gas Leases									
Leased area	Acres	3200	9855	14,741	17,150	320	0	2657	47,923
Leases	# of	*	*	*	*	*	*	1	1

* Not available

** Portions of allotments may be contained in several roadless areas. The combined value displays total allotments across a group of areas.

*** Rating also includes uranium, geothermal and other energy resources

1. Recreation

There are no developed recreational facilities within 1-943A, but many dispersed activities are available. Cutting firewood is common in more accessible areas and hunting, fishing, hiking, backpacking, and nature identification are also pursuits of the recreationist in this area.

Area 1-943B is used heavily for dispersed recreation such as fishing, recreational driving and camping, with hunting the major attraction. Heaviest use occurs in a corridor along Bloody Dick Creek in the eastern part of the area. Construction of a snowmobile trail through the area in 1983 from the Idaho border encourages snowmobile use during the winter months.

Area A1-943 has the only fishable lake (Twin Lakes) which contains lake and brook trout along with grayling and ling. It has a developed campground nearby that receives considerable visitor use. Area A1-943 also serves as a major access route to the high lake country along the Continental Divide. Valley bottoms in all areas that abut I1-943 provide conduits for high country snowmobile use.

Developed campgrounds are available in B1-943 at Lower Miner Lakes and at Van Houten Lake there is a campground immediately north of the area. There are spectacular vista points along the Continental Divide and pleasing landscapes are visible from most roads and trails. There are other dispersed recreational opportunities in the area; some off-road vehicle use at lower elevations and cutting firewood is common in more accessible areas. Area C1-943 receives much of the same activities as B1-943; Jahnke Lake is located in this unit.

Area I1-943 has no developed campgrounds, but it currently provides considerable recreation activity. Snowmobiling, especially at lower elevations, is a popular use but is not expected to expand due to rugged terrain. Other activities include hiking, nature appreciation and identification and rock climbing.

2. Wildlife

Wildlife diversity is very good in 1-943 primarily due to the broad range of elevations and habitat types inherent to this region. Black bear, mountain goats and transient populations of grizzly bear are particularly numerous in the Sheep Mountain portion of this area but are found throughout. Small game, nongame, marmot, pika, grouse and game birds also are plentiful in this region.

A combination of wildlife habitats occurs in 1-943A. Summer forage and cover is provided throughout for deer, elk and moose. The wildlife habitats include moose winter range, elk calving and rutting areas, elk wallows, and riparian zones. Except for some moose winter range in scattered willow bottoms, there is very little suitable big game winter range. Elk and deer generally migrate to the Salmon Valley in early winter. Larger streams contain brook trout and most streams serve as spawning grounds for the brook trout fishery of the Big Hole drainage. Fish productivity is low in upper reaches of all streams, and medium near the Forest boundary.

In Area 1-943B, moose winter in the lower creek bottoms. Bloody Dick Creek near the area has an excellent brook trout fishery and is heavily used by recreationists. Elk and deer winter and summer in the area.

Area A1-943 contains a combination of wildlife habitats. Summer forage and cover is provided throughout for deer, elk and moose. The wildlife habitats include elk calving and rutting areas, elk wallows, riparian zones, and a unique area of glacial deposits and water-filled potholes which are conducive to the brooding and rearing of waterfowl. Most deer and elk migrate to the Salmon-Bitterroot Valley in early winter, and most moose winter in lowland willow bottoms outside the area. Moose, Rock, Dry, Big Lake, and Big Swamp Creeks contain brook trout. Most streams are spawning areas for brook trout from the Big Hole River. Twin Lakes is the only fishable lake in the area and it contains lake trout, brook trout, grayling and ling.

Sufficient cover and forage is also available in units B1-943 and C1-943 to sustain populations of deer, elk and moose. All permanent streams contain brook trout and serve as spawning areas for the Big Hole River. High mountain lakes provide good, but erratic fishing. Fish species include cutthroat, brook and rainbow trout and various hybrids.

Most elk and deer in I1-943 migrate to the Salmon-Bitterroot Valley in early winter, and most moose winter in lowland willow bottoms outside the area. Nearly all streams provide spawning areas for brook trout from the Big Hole River. Fish productivity is low in the upper reaches of all streams and medium at lower elevations. Most of the high mountain lakes provide good but erratic fishing for rainbow, cutthroat and brook trout. This country appears to provide suitable habitat for bighorn sheep.

3. Water

This watershed of the West Big Hole provides the water supply for the city of Butte. It contributes significant amounts of water to the Upper Big Hole River and the southern portion of this review area produces essential irrigation supplies for numerous ranchers and residences. Stream conditions are generally good and the area produces excellent quality water, with low turbidity.

Area 1-943A has high quality water and several miles of irrigation ditches. Tributaries to the Big Hole River are plentiful and include Pioneer, Big and Little Moosehorn, Moose, and Miffin Creeks.

The capacity of 1-943B to receive, store and produce water is fairly high, and water quality is good. Park Creek, Bloody Dick Creek, Eunice Creek, and Kitty Creek are some of the drainages that originate in the area.

Area A1-943--water quality is high. Schulz Reservoir, located at the roadless area boundary, is used for irrigation. Many miles of irrigation ditches occur at lower elevations. Some of the major water sources include Rock Creek, Sawmill Creek, Lake Creeks, and Swamp Creeks. Twin Lake in this area has a surface of 75 acres.

Area B1-943--water quality here is high. Many miles of irrigation ditches in the unit serve the adjacent private lands. Englejard, Hamby, and Darkhorse Creeks are the major tributaries of the area that flow into the Big Hole River.

Area C1-943--Jahnke Creek, Pioneer Creek, and Berry Creek provide tributaries from this unit to the Big Hole River.

More than 30 percent of I1-943 has little vegetative cover. It is one of the highest water producing areas on the Forest and water quality is excellent. There are over 25 lakes in the area, the largest about 42 acres in size (Upper Miner). Moose Creek, Rock Creek, Big Lake Creek, Slag-a-Melt, Big Swamp, Miner, and Hamby Creeks, along with numerous other smaller drainages, contribute water to the Big Hole drainage.

4. Livestock Operations

Area 1-943A will affect operations on two grazing allotments covering approximately three-fourths of it; Ruby #68 and Rock Moose #67. There are three permittees who run 465 cow/calf pairs, 35 yearlings, and 28 horses. Also present are spring and fence developments. Rangeland is open sage and grasslands at lower elevations, complemented by scattered moist bottomlands and grassland stringers.

Area 1-943B has three grazing allotments that are located on most of it, involving the Bloody Dick #7, West Peterson #23, and Pioneer #264. Primary range is open grassland at lower elevations. Use is from mid or late June through September.

Area A1-943 contains four grazing allotments that deal mainly with stringer meadows. Portions of Twin Lakes #77, Dry Creek #254, Rock Moose #67 and Monument #263 cover the area. Five permittees run 730 cow/calf pairs and 35 yearlings. Several miles of fence and 5 spring developments are present. Cattle permits allow a summer grazing season from mid-June to October 15. Some grazing occurs on transitory range.

Area B1-943 contains three allotments. On these three permittees run 955 cow/calf pairs and 30 yearlings; three spring developments and fences are present. Allotments include portions of Twin Lakes #77, Monument #263 and Pioneer #264. Primary range is open grassland at lower elevations and scattered stringer meadows.

There is one allotment on C1-943, Pioneer #264, which runs 345 cow/calf pairs. Five spring developments and several miles of fence exist.

Area I1-943 has 5 allotments--Dry Creek #254, Twin Lakes #77, Monument #263, Pioneer #264 and Rock Moose #67. They deal mainly with stringer meadows. Approximately 60 percent of the suitable range is rated fair and 40 percent is rated good. The most significant grazing occurs in the Berry Creek drainage between June and September. Some range improvements have been constructed to protect fragile alpine areas outside allotment boundaries.

5. Ecology

Ecosystems and wildlife species are similar to those found in existing wilderness areas. Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of these areas are currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Englemann spruce habitats are found in the areas but are contained mostly in riparian and wet areas.

6. Timber

Most forested ground has moderate importance for timber with some locally high productive sites at the north end, especially in valley bottoms and on north-facing slopes.

Area 1-943A contains some post and pole size material and suitable sawlog material.

Area 1-943B has had some timber harvesting on some of the lower slopes, especially in the Bloody Dick drainage as well as post and pole cutting in the more accessible sites.

In Area A1-943 intensive timber management was initiated in the 1960's in Big Lake and Big Swamp Creeks. Natural regeneration has been very successful on the drier sites, but planting has been necessary on many moist sites.

Area B1-943--timber has been harvested for house logs and posts and poles since the early 1900's, but has been limited to accessible areas. Intensive timber management has not taken place in the area.

Area C1-943 has seen some harvesting of post and poles in accessible sites, but there has been no significant timber management.

Area I1-943--no timber harvest has been scheduled as it is part of a proposed wilderness area. The only evidence of past cutting is in the Big Swamp and Big Lake Creek drainages.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is very high for approximately 40 percent of the areas and moderate for approximately 60 percent. Past mineral production from these areas includes silver, gold, lead, zinc, and copper. The Silver Ridge Mine, within A1-943 is a currently producing underground lode. Mine operators are now proposing construction of an extensive milling facility within A1-943. The Ajax Mine (on patented ground surrounded by NF in I1-943) is undergoing development. There are numerous patented and unpatented mining claims and low standard access roads within the area. Geologic favorability for oil and gas is moderate. Portions of these roadless areas are leased for gas and oil.

8. Cultural Resources

Little is known of the existence of prehistoric cultural resources. The potential would be considered moderate in major drainage bottoms and low elsewhere. There are known historic resources scattered throughout the region but none have been evaluated for significance. Some old mines existing at heads of canyons date back to the late 1800's and early 1900's. There is an old mining community at Jahnke Lake in C1-943 and

I1-943 contains the historic Ajax Mill, which was built at the turn of the century.

9. Land Use Authorizations
Twin Lakes in A1-943 and Miner Lake in B1-943 have Forest administrative sites. I1-943 contains a special use road to the Ajax Mine.

10. Non-Federal Lands
Areas 1-943A and B contain no private acres. Area A1-943 has 843 acres; B1-943, 2,232 acres; C1-943, 7 acres and I1-943, 56 private acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Most areas present low fire occurrence, but there is potential for large fires with the buildup of downfall from a 1929-30 bug infestation in area B1-943.

2. Insect and Disease
The risk for mountain pine beetle infestation in lodgepole pine varies from moderate to high in all units at lower elevations and in drainage bottoms. It presently is endemic and sporadic.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
Major population centers within one day's travel time of the area include;

City	Population
Butte	36,000
Anaconda	10,000
Dillon	4,000
Deer Lodge	4,000
Helena	24,000
Missoula	33,000
Bozeman	22,000
Billings	67,000
Great Falls	56,000

National Forest wilderness and primitive areas within one day's travel time of the area include:

Anaconda-Pintler	25 miles
Lee Metcalf	100 miles

2. Contribution to Wilderness Preservation System
The West Big Hole Roadless Area is easily accessible and provides many recreational and resource opportunities on the Beaverhead National Forest from challenging rock climbing to hiking and other forms of primitive recreation. Lower elevation areas contribute ecological diversity to the National Wilderness Preservation System, representing

low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest

The West Big Hole was comprised of two RARE I identifications; West Big Hole #1 and the Essentially Roaded Area identified as "East Big Hole".

At the conclusion of RARE I an area of 38,369 acres in the West Big Hole was identified for wilderness study. This was an area approximately 24 miles long on the Big Hole side of the Continental Divide. Through land management planning efforts on the Forest, the study area was increased to 53,375 acres. This area was identified for wilderness study in the Final Beaverhead Land Management Plan issued February 15, 1978.

The RARE II process was underway at the time the Forest Land Management Plan was completed. Based on public input, it was determined that the Forest would leave a larger area than that identified in the Land Management Plan for further evaluation through RARE II. An area of 111,286 acres (gross) was included in the Draft Environmental Impact Statement (DEIS) for RARE II. This area was still about 24 miles long, bordered on the west by the Continental Divide and extending to the east, in some cases, to the Forest boundary. An adjacent area in the Salmon National Forest was also identified in the RARE II DEIS.

In the final RARE II process the area on the Beaverhead National Forest was divided into two units for analysis purposes. A higher altitudinal area, I1-943, containing approximately 53,000 acres was recommended for wilderness. This is approximately the same area as was identified in the Beaverhead Land Management Plan for wilderness study. The lower altitudinal area, A1-943, containing approximately 58,000 acres, was recommended for nonwilderness.

The final recommendations on RARE II were made April 15, 1979. Following the recommendations, boundaries of the areas recommended for wilderness were reviewed, adjusted in some cases to be more locatable or manageable on the ground, and submitted by the President to Congress with recommendations for wilderness classification. After boundary adjustment, the West Big Hole area contained 55,676 acres. The adjacent areas on the Salmon National Forest were recommended for nonwilderness.

On September 19, 1979, Congressman Pat Williams introduced a bill, H.R. 5344, recommending a wilderness of "not more than 86,000 acres" in the West Big Hole area. This bill identified an area that included most of the administration's RARE II proposal in area I1-943, a portion of area A1-943, and some additional acres outside the RARE II areas.

Following introduction of the bill, expressions of both opposition and support were voiced by various individuals and groups. Some of those voicing support also proposed that additional acreage adjacent to that proposed in H.R. 5344 should be managed as a recreation area. The total area proposed in H.R. 5344 and in the recreation area was approximately 122,393 acres. Those in opposition generally recommended that none of the area be designated as wilderness. In November 1979, Congressman Williams appointed a commission to study the proposals and to make recommendations for changes in the proposed boundary. The commission met several times but was unable to reach a consensus.

In January 1980, Congressman Williams and Senator John Melcher separately visited Dillon to meet with local citizens to discuss the wilderness proposals. On March 21, 1980, a hearing by the House Committee on Interior and Insular Affairs Subcommittee of Public Lands was conducted in Dillon by Congressman Williams and Congressman Morris Udall for the purpose of taking testimony on H.R. 5344. The proposal presented by Congressman Williams died in committee. Management decisions made for the West Big Hole were not substantially changed as a result of any proposals.

The 1982 Draft EIS for the Beaverhead Forest identified the I1-943 area as a proposed wilderness area, in recognition of the RARE II decisions for the area. Once again comments were divided pro and con on wilderness for the area with the proponents tending to support the recreation area proposal adjacent to the proposed wilderness.

In 1983, in response to the Decision of the Ninth Circuit Courts of Appeals in California v. Block, the roadless lands in the Big Hole were reinventoried for evaluation in the current Forest planning process. Public comment on the roadless area inventory was solicited in response to a "1983 Roadless Area Evaluation" brochure. Those who responded to the brochure expressed support for wilderness classification of the West Big Hole roadless lands and based that support on the "excellent wilderness qualities", watershed values, scenic nature, and excellent recreational values present in the area. Some respondents favored roadless classification of specific portions of the roadless lands, and only a few respondents voiced opposition specific to wilderness classification of lands in the West Big Hole.

In 1985, comments on the Revised Draft EIS and Proposed Plan Supplement for the West Big Hole Roadless Area was again highly polarized. Conservationist-oriented commentors, including the various wilderness organizations, supported wilderness designation in the West Big Hole. The Wilderness Society and its supporters recommended a wilderness area larger than proposed in the Forest Plan. Other commentors supported the Forest Service proposal or suggested boundary revisions resulting in larger or smaller wilderness recommendations. Those who favored wilderness designation said that such designation would protect water quality and flow and wildlife, fisheries, primitive recreation, scenic, and wilderness values.

Idaho conservationsists also favored wilderness designation for the Montana portion of the West Big Hole Roadless Area. They also support wilderness designation in the Idaho (Salmon National Forest) portion of this roadless area.

Big Hole residents who responded in writing or commented at various "open door" sessions held by the Forest generally opposed wilderness designation in the West Big Hole Roadless Area. However, most did not favor wide-spread development either. Essentially these commentors were opposed to "change" in the character of and traditional uses they have enjoyed on these lands. They were particularly concerned about limitations that would be placed on snowmobiling, a popular sport and pasttime in the Big Hole, and perceived limitations on or changes that may be made in traditional ranching operations. Some supported timber harvest, but most expressed concern about the number and mileage of new roads and about increased access through private lands. Many of these residents expressed concern for retaining an essentially "roadless" nature (without having "wilderness" or "roadless" designations) to maintain habitat conducive to producing large, branch-antlered bull elk and retaining the elk herds.

Some oppostion to wilderness designation was expressed by the Darby Lumber mill and by some small minerals interests. In general, however, timber industry was relatively silent on the subject of wilderness designation in this area, focusing instead on Forestwide concerns about removing timber from the suitable base and reducing timber sale costs. Minerals and energy interests also, for the most, spoke in general terms, asking that the Forest Service minimize impacts to entry, exploration and development opportunities.

Comments regarding the proposed recreation management area in the West Big Hole were similarly polarized; however, there was some support expressed for the recreation area by commentors other than those who supported wilderness designation.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the West Big Hole Roadless Area (1-943)

Management Emphases		Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Salmon National Forest											
Wilderness:		0	0	73,213	46,036	52,515	45,386	0	81,068	47,052	
Nonwilderness:		81,068	81,068	7855	35,032	28,553	35,682	81,068	0	34,016	
Beaverhead National Forest											
Group 1: 1/	1-943A	0	0	0	0	0	0	0	6626	6626	0
	1-943B	0	0	0	13,760	13,760	0	0	13,760	0	0
	A1-943	0	0	0	0	0	0	0	17,401	17,401	0
	B1-943	0	0	31,707	31,707	31,707	0	0	31,707	31,707	0
	C1-943	0	0	6202	6202	6202	0	0	6202	6202	0
	I1-943	55,087	0	55,087	55,087	55,087	0	55,087	55,087	55,087	55,087
Group 2: 2/	1-943A	6295	6494	5831	6560	4638	4903	5500	0	0	5811
	1-943B	12,934	11,283	10,732	0	0	6467	3580	0	12,384	3116
	A1-943	13,921	13,921	14,965	5220	16,357	6960	16,183	0	0	9759
	B1-943	19,024	22,195	0	0	0	4439	4756	0	0	0
	C1-943	3101	2853	0	0	0	2047	0	0	0	0
	I1-943	0	8858	0	0	0	46,268	0	0	0	0
Group 3: 3/	1-943A	0	0	0	0	0	0	0	0	0	0
	1-943B	0	0	138	0	0	0	500	0	0	103
	A1-943	0	0	0	0	0	0	0	0	0	0
	B1-943	0	317	0	0	0	0	0	0	0	0
	C1-943	0	0	0	0	0	0	0	0	0	0
	I1-943	0	0	0	0	0	0	0	0	0	0
Group 4: 4/	1-943A	331	66	0	66	0	1657	1060	0	0	0
	1-943B	826	2202	2752	0	0	7155	9680	0	1376	8389
	A1-943	3480	3306	696	12,181	1044	8352	0	0	0	5476
	B1-943	12,683	8561	0	0	0	21,878	26,951	0	0	31,707
	C1-943	3101	3101	0	0	0	3907	6202	0	0	6202
	I1-943	0	46,229	0	0	0	8819	0	0	0	0
Group 5: 5/	1-943A	0	66	795	0	1988	66	66	0	0	815
	1-943B	0	275	138	0	0	138	0	0	0	2152
	A1-943	0	174	1740	0	0	2089	1218	0	0	2166
	B1-943	0	634	0	0	0	5390	0	0	0	0
	C1-943	0	248	0	0	0	248	0	0	0	0
	I1-943	0	0	0	0	0	0	0	0	0	0
Beaverhead NF Total:	1-943	130,783	130,783	130,783	130,783	130,783	130,783	130,783	130,783	130,783	130,783
Salmon NF Total:	1-943	81,068	81,068	81,068	81,068	81,068	81,068	81,068	81,068	81,068	
ROADLESS AREA TOTAL:	1-943	211,851	211,851	211,851	211,851	211,851	211,851	211,851	211,851	211,851	211,851

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA; therefore only S is displayed.

1/ Group 1 is Wilderness emphasis.

2/ Group 2 is Timber emphasis.

3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.

4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.

5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis, Beaverhead Portion*

Management Emphasis	Alternative (Net Acres) A CD**	B	C	D	F	G	H	I	W	S PA***
Roaded:										
Decade 1	21,211	21,374	20,918	0	24,027	26,607	21,129	0	13,760	14,011
Decade 5****	75,696	130,783	37,787	0	24,027	123,706	33,643	0	13,760	22,310
Roadless:										
Decade 1	54,485	109,409	16,869	24,027	0	104,176	54,567	0	0	61,685
Decade 5****	0	0	0	24,027	0	7077	42,053	0	0	53,386
Wilderness:	55,087	0	92,996	106,756	106,756	0	55,087	130,783	117,023	55,087

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* The Summary of Management Emphasis for the Salmon Portion of Roadless Area 1-943 is not displayed, because that Forest has not yet finalized its alternatives. Only the wilderness/nonwilderness question has been addressed. For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Salmon National Forest portion of Area 1-943, refer to the Salmon Impact discussion beginning on page C- of this document.

** CD is the Current Direction Alternative.

*** PA is the Proposed Action Alternative.

**** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

(The following information is specific to the Beaverhead National Forest portion of this roadless area. The detailed discussion of the Salmon National Forest portion of this roadless area immediately follows the Beaverhead discussion in this document.)

1. Designation: Wilderness
   Management Emphasis: Wilderness

The West Big Hole Roadless Area (1-943A&B and A,B,C & I1-943) is designated wilderness in Alternative I. Portions of the West Big Hole Roadless Area are designated area to wilderness in all alternatives except B and G; from 7 percent in Alternative C to 89 percent in Alternative W. Area I1-943 is designated wilderness in Alternatives A, H and S (the Proposed Action). This constitutes 42 percent of the entire area.

Wilderness can enhance the area's wilderness attributes since there are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area could be eliminated. Established trail systems could be used for foot travel to the places of interest in the area.

The 19,941 to 76,978 acres of land tentatively suitable for timber production would not be available under this prescription, depending upon the alternative chosen. This would remove about 109 to 434 MMBF in standing volume (depending on the alternative selected). The better timber producing sites are on middle and lower slopes. The predominant species is lodgepole pine, with significant amounts of spruce in major riparian areas and Douglas-fir in stands adjacent to sagebrush areas at lower elevations. Existing volumes are highly variable though lodgepole pine stands on all but north aspects are usually low volume and of poor quality.

Current livestock grazing, 6074 AUM's, could continue on the portions of the 9 allotments involved but management practices may change. Presently, permittees use vehicles to some degree to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly. Management of livestock would require greater committments from the permittees.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource. Maintenance of existing improvements would continue, but access and getting materials to the site would be more difficult.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes might occur to various wildlife species, depending on natural events within these roadless areas, and effect wildlife populations negatively or positively. Basically wildlife habitat management would be accomplished through natural fires and long term effects would approximate a natural situation. Wildlife population levels would vary, sometimes greatly. No winter range exists for elk. Moose winter range occurs along the willow streambottoms of the major streams in these areas, as well as on adjacent private, State and BLM lands. Occassionally sightings of Grizzly Bear have occurred in these areas though use is probably transitory.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor. Presently, visual quality is very high from most locations within the Big Hole Valley. Improvements in visual quality would be minimal. Area I1-943 is spectacularly scenic with extensive amounts of alpine country. The other areas are substantially lower in elevation and do not have the viewing perspective of I1-943.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System.
>
> The absence of timber activities under this designation will permit a beetle epidemic to kill the larger lodgepole pine trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be vast acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir. Also, by excluding fire, timber-range ecotones will become dominated by Douglas-fir rather than by sagebrush.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest, the related industries would not be supported by this emphasis. Timber supply forest-wide would drop, resulting in a loss of jobs and income. The recreation service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access, resulting in a higher quality experience from a primitive recreation viewpoint. Area B1-943 contains Miner Lake campground, a popular camping and fishing area. Area A1-943 contains Twin Lakes, another popular fishing spot, and Twin Lakes campground.

Under a wilderness designation, this area would eventually be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. Approximately 40% of these areas have very high favorability for locatable minerals.

Exercise of valid existing rights on 231 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character. Ongoing and planned operations at the Ajax and Silver Ridge mines are a definite and continuing impact on the wilderness characteristics of these areas.

As of December, 1983, there were approximately 45,266 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the West Big Hole Roadless Area (1-943A&B and A,B,C & I1-943) are assigned these prescriptions in all Alternatives but I; from as little as 9 percent in Alternative D to 54 percent in Alternative G.

Intensive timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal requires construction of permanent roads and modifies the natural appearance of the area for approximately 25 to 40 years (or until the regeneration is high enough to hide the scars and present the appearance of an old burn). The stumps and incompletely burned slash piles would also be long-term, onsite evidences of man's activities. The cutting units themselves would be impacts visible from considerable distance, particularly those in areas A1-943, B1-943 and C1-943. These areas are visible from county highway 278 and the towns of Wisdom and Jackson.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities. However, this will be difficult on the graded outwash plains and uniform east-facing slopes that have little natural variety to emulate, especially since lodgepole pine dominates in these areas and requires some form of clearcutting for maintenance of stand health and vigor.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources on some allotments would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional costly fence construction and maintenance to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

The harvest scheduled in this roadless area could be shifted to other parts of the same analysis areas but not without exceeding the constraints designed to meet alternative objectives.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas. These will contrast clearly with the higher alpine areas of I1-943, severely adversely impacting those areas having very high scenic qualities and which are visible from long distances.
>
> In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities, but still may have a distractive visual affect on the higher areas of I1-943.
>
> The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.
>
> Elk security will be reduced in the short-term if existing stands are removed from cover capability. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated, to the extent practical, in accordance with Forest standards and guidelines.
>
> In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance. Prescriptions that do not allow for vegetative manipulation in the range program will allow the timber-range ecotones to become dominated by Douglas-fir.
>
> In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine. There will be a trend toward better distribution of age and size classes brought about through timber harvest.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries of the various emphases.

Social and economic effects center around the resource values of timber, minerals, wildlife, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed or higher elevation portions of the Forest thus concentrating and increasing use in the remaining areas. Primitive recreation would be affected the most because these opportunities become less available. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources. Approximately 40% of these areas have very high favorability for locatable minerals.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Less than 1 percent of the West Big Hole Roadless Area (1-943A&B and A,B,C & I1-943) is assigned these prescriptions in Alternatives B, C, H and S.

Under these prescriptions, motorized use will likely increase for range management and recreational purposes. Structural and nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, mostly unimproved wheeltracks, also could be expected to increase.

The continued and increasing use by more people, resulting in wheeltracks, foot trails, and disturbed vegetation and wildlife, tend to reduce the naturalness of and opportunities for solitude in the area. However, these impacts are not comparable to those associated with timber harvest.

With permittee cooperation there would be increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential. Presently, some range allotments rely on transitory range as a result of timber harvest to supply forage for the permitted number and carry those cattle through the permitted season of use.

Other nonpriced resource values are affected as follows:

> Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing vegetative succession to occur.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.

Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir encroachment. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Recreational opportunities would change somewhat, primarily because the alteration of the naturalness of the area and in the limitation of activities which would be disruptive to domestic grazing. Competition for available forage between livestock and wildlife may increase, to the detriment of wildlife (elk). Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

Portions of the West Big Hole Roadless Area (1-943A&B and A,B,C & I1-943) are assigned these prescriptions in all Alternatives but I; from less than one percent in Alternative F to 49 percent in Alternative B. The West Big Hole Recreation Area is included in this grouping in Alternatives H and S (the Proposed Action).

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential. Range use of I1-943 is insignificant.

Other nonpriced resource values are affected as follows:

Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.

Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to remain overmature and highly susceptible to mountain pine beetle. Barring other factors such as fire, eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other recreation service-oriented businesses and perhaps increase them. Mineral exploration could occur; however, cost to operations would likely increase somewhat under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. Approximately 40% of these areas have very high favorability for oil and gas.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the West Big Hole Roadless Area (1-943A&B and A,B,C & I1-943) are assigned these prescriptions in Alternatives B, C, F, G, H and S. The greatest proportion of the area is assigned in Alternative G (6 percent).

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will likely increase for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, (unimproved wheeltracks), also could be expected to increase. Areas affected would be all with the exclusion of I1-943.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.
>
> Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.
>
> In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush vegetative types. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase. This activity would occur on all areas except I1-943.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could eventually affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

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Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources. Approximately 40% of these areas have very high favorability for locatable minerals.

Roadless Area Name:	13943 West Big Hole	Gross Acres	Net Acres
	13943 (Salmon)	81,118	81,068
	1-943A (Beaverhead)	6,626	6,626
	1-943B "	13,760	13,760
	A1-943 "	18,244	17,401
	B1-943 "	33,939	31,707
	C1-943 "	6,209	6,202
	I1-943 "	55,199	55,087
	Total	215,095	211,851

I. DESCRIPTION (Salmon National Forest)

The West Big Hole Roadless Area is shared by the Salmon National Forest in Region 4 and the Beaverhead national Forest in Region 1. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The West Big Hole Roadless Area is approximately 10 air miles northeast of Salmon, Idaho. The entire area is bounded on the east by the Continental Divide. The Divide is the boundary between Idaho and Montana and also the boundary between the Salmon National Forest and the Beaverhead National Forest. The area is divided into two parts where the Forest boundary is separated by lands administered by the Bureau of Land Management. The southern portion of the area is bounded on the east by the Forest boundary and on the south by the Kenney Creek road. The northern portion of the area is bounded by the Forest boundary, the ridge between Tower Creek and Fourth of July Creek, the ridge between Sheep Creek and Wagonhammer Creek, and along Stein Gulch. The north boundary is a ridge between Little Sheep Creek and Lick Creek. Access to the area can be gained from the roads up the many drainages that have their headwaters in the area.

The area is dissected by many streams that drain into the Lemhi, the Salmon, and the North Fork of the Salmon Rivers. Elevations range from approximately 5,600 feet to over 10,200 feet at Freeman Peak. Glaciation has formed broad U-shaped valleys at the heads of the Major drainages, however, there was very little cirque development. Many high, rocky peaks and rocky ridges occur throughout the area. This high country is typical of alpine glaciated country. Average annual precipitation is between 15 and 35 inches, falling mostly as spring and fall rains or winter snow. Summer high temperatures of 80 and 90 degrees at the lower elevations are contrasted by high elevation winter lows of 40 degrees below zero. Quartzite bedrock forms the area's loamy sand to sandy loam textured soils.

Ponderosa pine and Douglas-fir at the lower elevations are replaced by lodgepole pine, subalpine fir, Engelmann spruce and some whitebark pine at the higher elevations. Grassy openings and wet meadows are scattered throughout the area. Rock outcroppings and talus slopes occur on the high peaks and ridges. The three ecosystem types represented in the area are western spruce-fir, grand fir-Douglas-fir, and alpine meadows and barren.

Recreation use estimated at 2,900 RVD's in 1982 is primarily related to hunting, trail machine riding, and backpacking.

Several intrusions were identified in the area through public and in-service input. There are seven road corridors--Pratt Creek, Wimpy Creek, Freeman Creek, Eagle Mountain, Bradley Gulch, Sandy Creek, and Kenney Creek--associated with mineral and timber activities and private land access. These roads have been and will continue to be periodically maintained. There are six intrusions associated with timber sale activity; two of these are in the Carmen Creek drainage, one is in the Black Tail Creek drainage, one in Silverleads, one in Dry Gulch, and one in Sheep Creek. These intrusions total 2,000 acres. The areas directly impacted by these activities no longer meet roadless area criteria and those portions of the roadless area will not be considered further for wilderness.

The area is contiguous with another roadless area (#01943) on the Beaverhead National Forest on the east, and lands administered by the BLM on the south. It is separated by a primitive jeep trail from the Silverleads Roadless Area (#13519) on the west, and is bordered by developed National Forest System lands on the west and north.

The Continental Divide National Scenic Trail Corridor passes through this roadless area. The area contains significant amounts of outstanding scenery.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

There has been virtually no influence by man on the natural integrity of this unit, with the exception of a timber sale in the Carmen Creek drainage near the head of Little Silverleads Creek and a few scattered mining related impacts. Existing roads up Carmen, Freeman, Pratt and Wimpey Creeks effectively provide access to the interior of the roadless area. Mining impacts are very apparent in the head of Wimpey Creek and especially Pratt Creek where there remain numerous buildings and other structures from past activities. Visitors would find this unit to be natural appearing, except in areas of past extensive mining.

B. OPPORTUNITIES FOR SOLITUDE

This area provides a very high opportunity for solitude based on its large size, distance from core to perimeter, topographic and vegetative screening. Only the existence of some permanent off-site intrusions prevent it from being rated as outstanding. The area also provides very high opportunities for primitive recreation due to the above factors and a high degree of diversity and minimal developed recreation facilities.

C. PRIMITIVE RECREATION OPPORTUNITIES

This area provides a very high opportunity for primitive recreation. It offers many opportunities for challenging experiences due primarily to terrain features. It fully meets the attributes necessary for consideration as wilderness and offers may opportunities for challenging experiences due primarily to terrain features.

D. OTHER FEATURES

This area contains no remarkable topographical, geographical or cultural features.

E. MANAGEABILITY AND BOUNDARIES

Logical and manageable boundaries could be developed for this unit. Boundary changes would be necessary, as the existing unit has been virtually cut in two by a timber related intrusion. Size is not a factor with this unit. During public involvement, input was received to the effect that the "jeep road" separating the West Big Hole and the Silverleads Roadless Areas was not a road, but a trail along the old phone line. This was verified and the inventory was adjusted by combining the Silverleads Roadless Area #13519 with the West Big Hole #13943. The entire area is not identified as West Big Hole #13943.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-943A VALUE	1-943B VALUE	A1-943 VALUE	B1-943 VALUE	C1-943 VALUE	I1-943 VALUE	13943Salm. VALUE	COMBINED VALUE
Acres									
Gross	Acres	6626	13,760	18,244	33,939	6209	55,199	81,118	215,095
Net	Acres	6626	13,760	17,401	31,707	6202	55,087	81,068	211,851
Recreation									
Primitive	RVD's	84	171	68	124	24	695	0	1166
SPNM	RVD's	122	249	96	175	34	1013	0	1689
SPM	RVD's	121	246	102	185	35	1002	2700	4391
Roaded Natural	RVD's	*	*	*	*	*	*	200	200
Range									
Exist. obligated suit.	Acres	858	1631	3560	8240	1617	1039	2250	19,195
Allotments	# of	2	3	4	3	1	5	6	15**
AUM's	AUM's	354	716	1376	2814	433	381	450	6524
Exist. vacant suit.	Acres	0	0	0	0	0	0	0	0
Allotments	# of	0	0	0	0	0	0	0	0
Proposed suitable	Acres	0	0	0	0	0	0	2250	2250
AUM's	# of	0	0	0	0	0	0	450	450
Timber									
Tentative suitable	Acres	6248	11,041	14,251	21,393	4104	19,941	22,976	99,954
Standing Volume	MBF	34,915	65,083	81,158	118,936	24,419	109,032	113,600	547,143
Corridors									
Existing/Potential	# of	0	2	0	0	0	0	0	2
Wildlife T&E									
Bald Eagle	Acres	0	0	0	0	0	0	0	0
Gray Wolf	Acres	*	*	*	*	*	*	80,741	80,741
Big Game									
Winter Habitat	Acres	1817	1251	4397	8506	967	26,270	21,120	64,328
Summer Habitat	Acres	*	*	*	*	*	*	81,618	81,618
Elk									
Winter Habitat	Acres	0	0	0	0	0	0	21,120	21,120
Summer Habitat	Acres	*	*	*	*	*	*	81,618	81,618
Deer									
Winter Habitat	Acres	0	0	0	0	0	0	15,000	15,000
Summer Habitat	Acres	*	*	*	*	*	*	81,618	81,618
Significant Fisheries									
Stream Miles	Miles	9.0	16.1	20.0	40.2	8.7	53.8	15.5	163.3
Stream Habitat	Acres	6.7	7.5	18.0	29.6	4.8	21.8	23.2	111.6
Lakes	# of	5	0	29	72	8	75	4	193
Lake Habitat	Acres	6	0	122	197	24	492	11	852
Water Developments									
Existing	# of	1	0	0	0	0	1	0	2
Minerals									
Very High	Acres	3976	4128	8701	0	2047	38,569	0	57,421
High	Acres	0	0	0	0	0	0	81,068	81,068
Moderate	Acres	2650	9632	8700	31,707	4155	16,518	0	73,362
Low	Acres	0	0	0	0	0	0	0	0
Claims	# of	27	18	62	4	10	110	214	445
Oil and Gas Potential									
Very High	Acres	0	0	0	0	0	0	0	0
High	Acres	0	0	0	0	0	0	0	0
Moderate	Acres	6626	13,760	17,401	31,707	6202	55,087	0	130,783
Low	Acres	0	0	0	0	0	0	81,068***	81,068
Oil and Gas Leases									
Leased area	Acres	3200	9855	14,741	17,150	320	0	2657	47,923
Leases	# of	*	*	*	*	*	*	1	1

* Not available

** Portions of allotments may be contained in several roadless areas. The combined value displays total allotments across a group of areas.

*** Rating also includes uranium, geothermal and other energy resources

1. Recreation
Recreation use in this unit is expected to increase significantly in the future as implementation of the Continental Divide National Scenic Trail proceeds. Increases will be primarily in backpacking, hiking, and horseback riding, with some increase in hunting as access improves. Recreation use was estimated at 3,100 RVD's in 1982 and is primarily related to hunting and backpacking with limited trail bike riding.

2. Wildlife
This large area is bounded on the east by the Continental Divide and consists primarily of rugged high-elevation lands, with numerous peaks in excess of 9,500 feet high. Mountain goats are found throughout the area, as are marmots and pikas. This area contains the entire upper portion of the Sheep Creek drainage and the Goldstone Pass-Kenney Creek area, both of which are considered "core" areas of paramount importance to the migration corridor for interstate mule deer and elk herds. It also contains areas of key big game range in Little Sheep Creek, Stein Gulch, and Kenney Creek. Black bear and mountain lion are particularly numerous in the Sheep Creek portion of this area, but are found throughout. Resident elk are present in small numbers in most drainages, and resident mule deer occur throughout the area. Bighorn sheep are occasionally observed, but actual status of this species is not known. Wildlife habitat diversity is very good, primarily due to the broad range of elevations and habitat types inherent to this area.

This area also contains significant anadromous fish habitat in Sheep Creek, which is in essentially pristine condition. In addition, numerous other streams provide habitat for resident trout. Present habitat condition in these other streams is excellent. Three mountain lakes within the area have the potential to support fish. Fishing use of most area streams is light, with quality rated as fair to good. The anadromous production potential is substantial.

3. Water
The southern portion of the roadless area produces essential irrigation supplies for numerous ranchers and residences. Stream conditions are generally good, and the area produces excellent quality water. A pipeline has been constructed for transporting water in the Wimpey Creek area.

4. Livestock Operations
Six cattle and horse grazing allotments extend into the roadless area along the western and southern boundaries. The six allotments are Sheep Creek, Burns Basin, Fourth of July Creek, Carment Creek, Pattee Creek, and Sandy Creek. Very little suitable range is actually within the boundary of the roadless area. In total, the roadless area contributes fewer than 450 AUM's of permitted use each year. There are several short drift fences within the roadless area boundary. Approximately 60 percent of the suitable range is rated fair and 40 percent rated good.

5. Ecology
There are two proposed Research Natural Areas (Kenney Creek and Davis Canyon) within the boundary of the roadless area. The Davis Canyon site contains an excellent representation of an elk sedge meadow. Although

this site represents a unique vegetative community, the area does not contain any ecosystems determined from RARE II to be in need of representation in the wilderness system.

6. Timber

Approximately 28 percent of the area is potentially suitable timberland. An estimated 139.4 million board feet of sawtimber growing stock volume within the area have an estimated annual potential yield of 1.5 million board feet. The volume is composed primarily of Douglas-fir at lower elevations and lodgepole pine at higher elevations. Alpine fir and Engelmann spruce also occur as minor components. One sale of approximately two million board feet was sold in the center of the unit in Carment Creek in 1981. A small intrusion on the northwest border resulted from part of a cutting unit from a 1968 timber sale that was erroneously included in the original roadless evaluation. A salvage sale of blown down material is proposed for 1983 in the head of Fourth of July Creek. If a purchaser is not found, it is proposed to provide access to the area to allow the material to be gathered for firewood. An additional small intrusion would result from a portion of a one million board feet sale in 1986 on the northwest border. Several cutting units of a 5.3 million board feet sale in 1975 intrude at the head of Little Silverleads Creek. A 3.9 million board feet sale which was sold in 1981 in the head of Wagonhammer Creek has had no activities started to date.

7. Minerals/Oil and Gas

The hardrock mineral potential of this area was rated as high in the RARE II evaluation, and no new data modifies the original rating. Past mineral production from this area includes silver, gold, lead, zinc, and copper. There are numerous patented mining claims and associated low standard access roads within the area. Mining claim owners are continuing assessment work in this roadless area. Although one oil and gas lease has been issued within the area since RARE II, there is no known potential for currently leasable minerals.

8. Cultural Resources

Little is known of the existence of prehistoric cultural resources. The potential would be considered moderate in major drainage bottoms and low elsewhere. There are known historic resources scattered throughout the unit, but none have been evaluated for significance.

9. Land Use Authorizations

Roadless area lands in the North Fork of the East Fork of Tower Creek, for a length of 0.6 mile, are under permit to Thomas Conrad for culinary and irrigation water purposes. Parts of the area have previously been, but are not now, under permit for outfitter/guide purposes. The roadless area also includes 31.6 miles of system trail, 3.8 miles of which are within the upper Carmen Creek intrusion. There are also 3.3 miles of the historic Lewis and Clark Trail in the Silverleads-Wagonhammer portion of the area.

10. Non-Federal Lands

There are two tracts of private land in upper Fourth of July Creek and two tracts in Gold Star Gulch, totaling 36.7 acres and 13.6 acres, respectively.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire occurrence is high in the Silverleads-Wagonhammer portion with potential for large fires. It is moderate over the rest of the area.

2. Insect and Disease

Much of the area contains high elevation (noncommercial) timber types, which are less susceptible to insect attack. However, there is an increasing hazard of a mountain pine beetle epidemic in the lower elevation lodgepole stands. Many lodgepole stands have slow growth due to dwarf mistletoe or over stocking. Western spruce budworm is periodically killing some of the understory Douglas-fir, especially on the drier sites. Occasionally, the tops of the larger trees are being killed. The Douglas-fir beetle periodically kills small groups of the older, larger Douglas-fir. Dwarf mistletoe is causing serious deterioration in many Douglas-fir stands north of Kirtley Creek.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The West Big Hole Roadless Area is approximately 50 road miles from the River of No Return Wilderness. Use of this wilderness ranges from low to high, depending on the particular area. The Roadless Area is approximately 15 road miles from Salmon, Idaho; 155 miles from Idaho Falls, Idaho; and 115 miles from Missoula, Montana.

2. Contribution to Wilderness Preservation System

The elk sedge meadow complex on the Davis Canyon site represents a unique ecological component.

3. Public Interest

During RARE I this area was inventoried as the Silverleads #291, the Beaverhead I #292 and Beaverhead II #294 roadless areas. The decision in the RARE I FEIS was to manage these areas for nonwilderness resource developement. Public opinion received on the areas during RARE I was divided. The area was not considered controversial during RARE I.

The RARE I Silverleads #291 portion of the area was inventoried and evaluated in the Silverleads Unit Land Management Plan (LMP). The decision in the LMP was to manage this area for nonwilderness resource development, with a portion of the area being managed in a roadless condition. Again, the public opinion was for nonwilderness resource development. The wilderness-nonwilderness issue was not highly controversial in the LMP process. During this evaluation, the Stein Mountain Lookout phone line trail was considered a jeep road which accounted for the individual evaluation. This portion of the Roadless Area was not evaluated in RARE II because of the LMP process.

During RARE II the Beaverhead I #292 and Beaverhead II #294 roadless areas were inventoried and evaluated as the West Big Hole Roadless Area #04943. During the evaluation, the area was 'split' into three segments; i.e., the North South, and Middle West Big Hole units. The decision on the RARE II FEIS was for nonwilderness resource management for all three segments. Public opinion was divided but there was strong sentiment from environmental organizations that the area should be wilderness. They included the area as a wilderness candidate in their RARE II Idaho Citizens' Alternative "W". The area was considered controversial during RARE II.

The area is contiguous with roadless lands on the Beaverhead National Forest in Montana (Roadless Area #01943). A portion of this area was recommended for wilderness in the Beaverhead Forest Land Management Plan. The area was highly controversial on the Beaverhead during RARE II and their Forest Planning process.

Senator McClure held "Idaho Forest Management Act" hearings in Coeur d'Alene, Lewiston, Boise, and Idaho Falls in August 1983. Prior to the meetings, the Senator sent out a constituent letter with four proposals; i.e., Forest Service RARE II, Forest Industries, Other Commodity user groups, and the 1979 Idaho Wildlife Federation Proposal. Following the hearings Senator McClure has received additional input from the environmental groups and the Governor of Idaho. The environmental groups have recommended wilderness for approximately 51,000 acres on the Idaho portion of the West Big Hole. The area was not included in any of the Governor's recommendations for wilderness or roadless management. The Idaho Department of Fish and Game recommended 7,190 acres on the RARE II portions known as North West Big Hole (N4943) and 44,505 acres on the Middle West Big Hole (M4943) for further planning.

During the Forest Planning review of inventoried roadless lands, public opinion was again divided ranging from no wilderness to all wilderness. The Idaho Wildlands Defense Coalition recommended 51,000 acres for wilderness. The Idaho Fish and Game Commission recommended the RARE II North - West Big Hole (7,190 acres) and the Middle - West Big Hole (44,505 acres) for wilderness. Earth First! recommended the entire area for wilderness. The Idaho Wildlife Federation (IWF) and Idaho Outfitters and Guides Association (IOGA) recommended wilderness status for 70,500 acres. The Idaho Environmental Council supported the IWF and IOGA recommendations.

The Idaho Mining Association, Idaho Cattlemen's Association, Outdoors Unlimited, Idaho Farm Bureay, Idaho Wool Growers, Idaho Trail Machine Association, Idaho Forest Industries Council, and Idaho Women in Timber all recommended no wilderness for the West Big Hole area. The wilderness-nonwilderness issue on the West Big Hole generated a relatively low level of controversy during Forest Plan review of roadless areas.

Senator McClure has introduced the Idaho Forest Management Act in the Senate. The West Big Hole Roadless Area was not included in this proposed wilderness legislation.

Following the introduction of Senator McClure's proposed Idaho Forest Management Act, considerable concern was expressed by the various environmental groups over the low acreage in the Bill. Governor Evans has also expressed concern and has modified his recommendation to Senator McClure. His letter, dated April 4, 1984, in part, states:

"In addition to the areas I have listed, there are other areas worthy of special consideration. First, the North Lemhis and the West Big Holes near Salmon are currently the topic of negotiations involving ranchers, conservationists, and people associated with the forest products industry. I support the negotiations on these areas and I am hopeful that the recommendations made will ultimately be incorporated in this bill."

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Prescription Assignment by Alternative for the Salmon portion of the Roadless Area.

Alternatives	Wilderness	Non-Wilderness Roaded	Unroaded
1	0	64,645	16,423
2	45,386	35,682	0
3	46,036	0	35,032
4	46,036	35,032	0
5	0	81,068	0
6	0	0	81,068
7	52,515	0	28,553
8	60,391	0	20,677
9	73,213	0	7855
10	73,213	7855	0
11	81,068	0	0
12	0	28,553	52,515

(There will be a detailed discussion of these alternatives in the Salmon National Forest Draft EIS when that document is published.)

B. Impact

1. Designation: Wilderness Management
   Prescription: Wilderness

The following information is specific to the Salmon National Forest portion of this roadless area. The detailed discussion of the Beaverhead National Forest portion of this roadless area immediately precedes the Salmon discussion in this document.

A wilderness management prescription was considered for Alternative 2 (45,386 acres), 3 and 4 (46,036 acres), 7 (52,515 acres), 8 (60391 acres, 9 and 10 (73,213 acres), and 11 for the entire area (81,068 acres).

Wilderness management would enhance the recreation opportunities of those visitors seeking a non-motorized wilderness type experience. It would curtail, however, the opportunities of those visitors who desire to use motorized means, primarily trail bikes, to access the area. Current motorized use of the area is not significant.

Under this management, recreation use would continue to be dominated by big game hunting although significant amounts of backpacking, horseback riding, and fishing do occur.

The Recreation Opportunity Spectrum classification for the portion designated wilderness would be semi-primitive nonmotorized.

Visual Quality would be preserved in those portions designated wilderness.

The summer habitat potential for resident elk ranges from 89 to about 125 animals under these alternatives. However, the real importance of this area is for migration and holding areas for elk. Therefore, the total wilderness or wilderness/roadless descriptions translate into an elk habitat potential of approximately 650 animals as as reflection of the importance of roadless management to that migration. Mule deer habitat potential for each alternative is approximately 774 animals because of the relative tolerance of mule deer to human activity.

Anadromous fish production potentials under Alternatives 2 and 4 would be lowered to near MVP levels. Resident fish production would be at natural levels within the wilderness area, production levels in other areas would be at MVP levels.

All other wilderness alternatives would generate similar resident and anadromous production numbers. Levels would be at natural habitat levels.

Grazing is currently managed under a low intensity concept of environmental management with livestock. This level of livestock management intensity would remain unchanged for all alternatives. Currently, there are approximately 2250 acres of suitable range and 450 AUM's of permitted grazing use.

There would be insignificant impact on tentatively suitable timberlands resulting from wilderness designation in Alternative 2. Approximately 60 percent of tentatively suitable timberland in Alternatives 3 and 4, 40 percent in Alternative 7, 80 percent in Alternative 8, 90 percent in Alternatives 9 and 10, and 100 percent in Alternative 11 would become not available under wilderness designation.

The areas considered for wilderness in this roadless area have a high hardrock mineral potential. There are 214 existing mining claims included in the areas considered for wilderness in Alternatives 8, 9, 10, and 11; 206 in Alternative 7; 182 in Alternative 2; and, 159 in Alternatives 3 and 4. The area would be unavailable for mineral development unless existing claims proved to merit development.

2. Designation: Nonwilderness
Management Prescription: Nonwilderness - roaded

Nonwilderness roaded management was considered in Alternative 1 (64,645 acres), Alternative 2 (35,682 acres), Alternative 4 (35,032 acres), for the total area in Alternative 5 (81,068, in Alternative 10 (7855 acres), and in Alternative 12 (28,553).

The current mix of recreation uses would not change significantly.

The Recreation Opportunity Spectrum classification would be roaded Natural where roads are actually constructed, but would remain Semi-Primitive Motorized throughout most of the area.

Visual Quality would be retained throughout most of the area with lesser amounts of Partial Retention and even less amounts of modification.

Elk habitat potential for these alternatives range from 32 to 106. Mule deer habitat potential remains at approximately 774 animals.

Fish production levels for Alternative 1 would be sufficient to meet State goals. Alternatives 2, 4, 5, 10, and 12 would manage fish habitat to meet MVP requirements.

Grazing is currently managed under a low intensity concept of environmental management with livestock. This level of livestock management intensity would remain unchanged for all alternatives. Currently, there are approximately 2250 acres of suitable range and 450 AUM's of permitted grazing use.

Approximately 30 percent of the tentatively suitable timberland in Alternative 4, 60 percent in Alternative 12, 95 percent in Alternatives 1 and 2, 3 percent in Alternative 10, and 100 percent in Alternative 5 would be designated for roaded management. In areas of roaded management, the possibility of wilderness designation would be foregone generally after the first decade.

Mineral development opportunities would not be effected.

3. Designation: Nonwilderness
Management Prescription: Nonwilderness - Unroaded

Nonwilderness unroaded management was considered in Alternative 1 (16,423 acres), 3 (35,032 acres), the entire area in Alternative 6 (81,068), 7 (28,553 acres), 8 (20,677 acres), 9 (7,855 acres), and 12 (52,515 acres).

The current mix of recreation uses would not change significantly.

The big game situation would remain essentially unchanged.

Fish habitat potential would remain essentially at natural levels.

Grazing is currently managed under a low intensity concept of environmental management with livestock. This level of management intensity would remain unchanged for all alternatives. Currently, there are approximately 2,250 acres of suitable range and 450 AUM's of permitted grazing use.

Approximately 5 percent of the tentatively suitable timberland would be designated unroaded management in Alternatives 1 and 9, while approximateoy 10 percent in Alternative 8, 30 percent in Alternative 3, 40 percent in Alternatives 7 and 12, and 100 percent in Alternative 6 would be so designated. Unroaded management would require that timber be harvested from outside the area or through aerial methods. Timber harvest would not occur during the first decade in unroaded management areas, but would generally have been implemented in all areas by the end of the fifth decade. Since no roading would occur in conjunction with unroaded timber management, the harvest by itself would not have long term effects on wilderness attributes.

Mineral development opportunities would not be effected.

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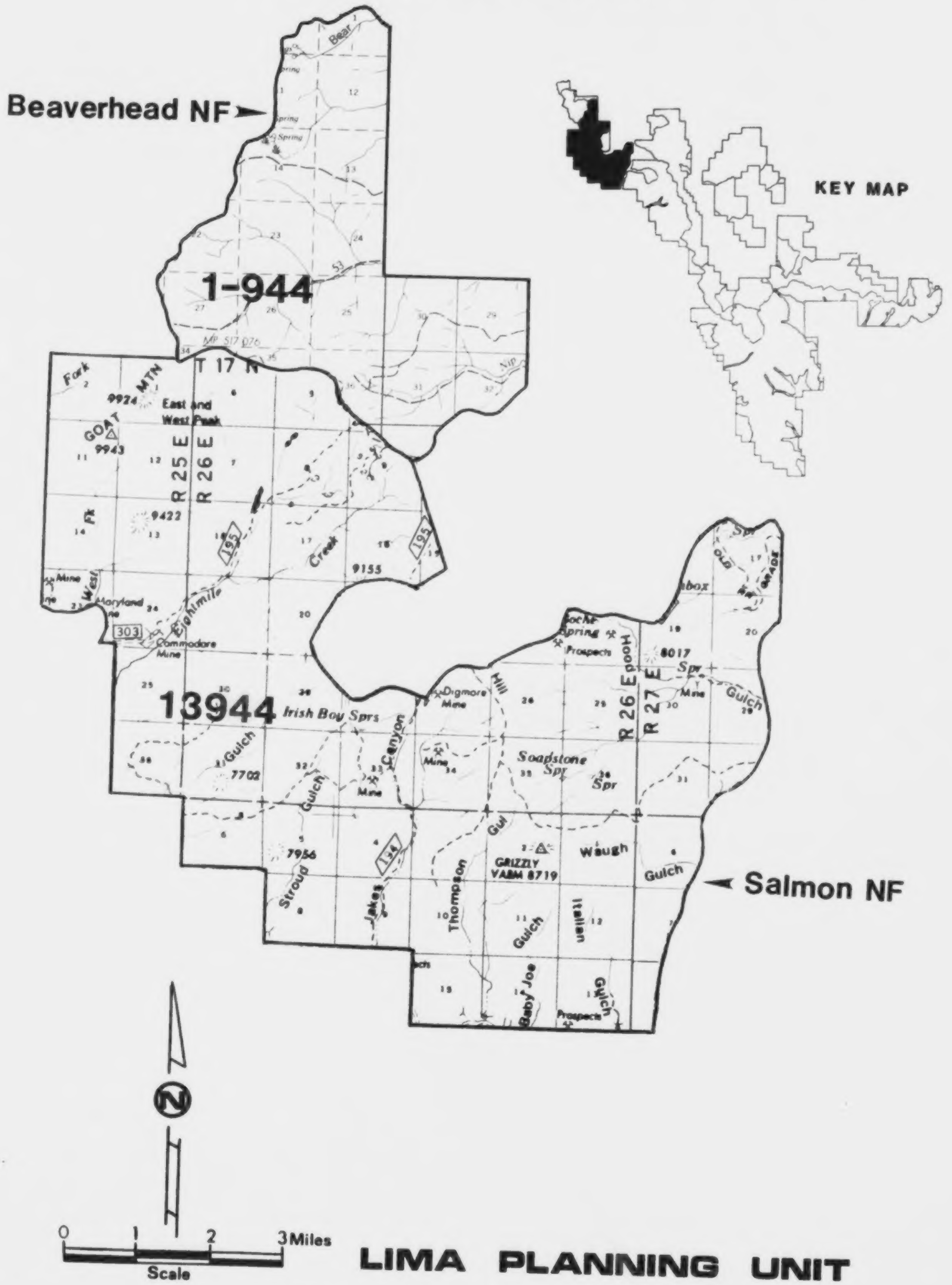
ROADLESS AREA 1-944

GOAT MOUNTAIN


Beaverhead NF
1-944
13944
KEY MAP
Salmon NF
T 17 N
R 25 E
R 26 E
R 27 E
GOAT MTN
East and West Peak
9924
9943
9422
9155
8017
7702
7956
GRIZZLY VABM 8719
Eightmile
Creek
West Fk
Fork
Bear
Spring
Maryland Mine
Commodore Mine
Digmore Mine
Irish Boy Sprs
Canyon
Gulch
Stroud
Jakes
Thompson
Baby Joe
Italian
Waugh
Soapstone Spr
Hoodoo
Hill
Locke Spring
Prospects
Mine
195
303
134
MP 517.076
0
1
2
3 Miles
Scale

LIMA PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name:	1-944 Goat Mountain	Gross Acres	Net Acres
	4-944 Salmon	35,488	35,468
	1-944 Beaverhead	9,454	9,454
	Total	44,942	44,922

I. DESCRIPTION (Beaverhead National Forest)

The Goat Mountain Roadless Area is shared by the Beaverhead National Forest in Region 1 and the Salmon National Forest in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The Goat Mountain Roadless Area is located approximately 45 miles south of Dillon, Montana. It extends from the Forest boundary in the vicinity of Bear Gulch on the north to the South Fork of Divide Creek on the south. It borders the Continental Divide and Salmon Forest for some distance on the west. The major drainages are Black Canyon and Frying Pan Creeks. It is accessed from dirt jeep roads off County roads in the Horse Prairie area.

The area is mountainous with scattered open parks. Deep, incised, V-shaped canyons, separated by narrow ridgetops, characterize the area. Canyon sideslopes are long, moderately steep, and smooth to slightly undulating. Valley bottoms are very narrow with steep valley sideslopes. Major drainages flow to the northeast and east, creating strong aspect differences on opposite valley sidewalls. A few small rocky glacial cirques lie just below the Divide, but the area has not been strongly glaciated. Elevations range from 7,400 feet in the bottoms to 9,400 feet along the Continental Divide.

Most soils are moderately deep, rocky loams. On the gentler slopes, under heavy forest, soils have a loam or fine sandy loam surface layer and a clay loam subsoil. Shallow, rocky loams with a thin silt loam surface occur along the Continental Divide.

Grassland and sagebrush/grassland with scattered patches of Douglas-fir occur on lower elevation and south-facing slopes. Mid-elevation and north-facing slopes are forested with lodgepole pine, subalpine fir, and Engelmann spruce (the dominant species). Douglas-fir occurs at lower elevations and on southerly aspects. At higher elevations the forest grades into whitebark pine and subalpine fir forest.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Although there are no developed sites in this area, there are relatively low to moderate values for wilderness. The range developments, timber sales and subsequent roads, and many low standard roads impact the natural integrity and appearance within the unit.

B. OPPORTUNITIES FOR SOLITUDE

There is some topographic and much vegetative screening; however, there is little diversity of opportunity.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunities for challenging experiences are limited.

D. OTHER FEATURES

This area is included with the Salmon National Forest in the "Wolf Coordination Study" and there are numerous locations of lithic scatterings.

E. MANAGEABILITY AND BOUNDARIES

This area could be managed as a wilderness area and combined with adjacent roadless areas on the Salmon National Forest into a larger area. There is adjacent BLM and private ground on the east. This area would require extensive posting.

Beaverhead National Forest

1977 Inventory Acres:	11,800 gross	11,800 net
1983 Inventory Acres:	9,454	9,454
Change	- 2346	- 2346
Reason for change in inventory acres;		
F.Y. 1983 Timber Sale(s)	- 2362	- 2362
Acreage Recalculation	+ 16	+ 16

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-944 Bvhd VALUE	1-944 Salmon VALUE	COMBINED VALUE
Acres				
Gross	Acres	9454	35,488	44,942
Net	Acres	9454	35,468	44,922
Recreation				
Primitive	RVD's	119	0	119
SPNM	RVD's	174	1000	1174
SPM	RVD's	172	1800	1972
Range				
Existing obligated suitable	Acres	4395	9994	14,389
Allotments	# of	4	4	8
AUM's	AUM's	973	2653	3626
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0

Resource Potentials (continued)

Proposed vacant suitable	Acres	0	10,182	10,182
AUM's	AUM's	0	2980	2980
Timber				
Tentative suitable	Acres	4602	2810	7412
Standing Volume	MBF	23,659	15,080	38,739
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	1878	16,640	18,518
Summer Habitat	Acres	*	35,468	35,468
Elk				
Winter Habitat	Acres	1508	16,640	18,148
Summer Habitat	Acres	*	30,436	30,436
Deer				
Winter Habitat	Acres	0	4500	4500
Summer Habitat	Acres	*	35,468	35,468
Significant Fisheries				
Stream Miles	Miles	4.1	2	6.1
Stream Habitat	Acres	.6	2.2	2.8
Lakes	# of	1	1	2
Lake Habitat	Acres	1	2	3
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	0	0	0
High	Acres	9454	35,468	44,922
Moderate	Acres	0	0	0
Low	Acres	0	0	0
Claims	# of	12	204	216
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	9454	0	9454
Low	Acres	0	35,468**	35,468
Oil and Gas Leases				
Leased area	Acres	2240	2000	4240
Leases	# of	*	1	1

*Not available

**Rating also includes uranium, geothermal and other energy resources.

1. Recreation

Hunting is the predominant recreational use.

2. Wildlife

This roadless area contains summer and winter elk and deer range. All Major streams sustain populations of trout, with brook trout the predominant species. Grouse and furbearers common to western Montana occupy the area.

3. Water

The capacity of this area to receive, store, and produce water is fairly low. The area contains one 1-acre lake.

4. Livestock Operations

Most of the area is grazed by cattle except for some of the steeper or timbered lands. Most of the range is primary range with minor amounts of secondary range. The North Black Canyon and South Bear Canyon are the grazing allotments involved in this area.

5. Ecology

Upper elevations exhibit mostly subalpine fir habitats while the lower elevations contain Douglas-fir habitats. The majority of this area is currently occupied by seral lodgepole pine stands ranging in age from 80 to 250 years. Engelmann spruce habitats are found in the area but are contained mostly in riparian and wet areas. Lower elevation grass and sagebrush lands are representative of grass and grass-sagebrush steppes.

6. Timber

Most of area 1-944 is in the timber base. This will probably continue in the future. There are 4602 acres of suitable timber with 23.7 MMBF of standing volume in the Beaverhead portion of 1-944.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is high. Geologic favorability for oil and gas is moderate. Some of this area is leased for oil and gas and it is assumed requests to lease the rest will be forthcoming. There are some scattered hardrock prospects.

8. Cultural Resources

This area contains numerous locations of lithic scatterings (agate outcroppings) on the lower foothills of the area. These sites are widely dispersed.

9. Land Use Authorizations

Authorizations that were previously included in this area were eliminated from the present inventory.

10. Non-Federal Lands

This area contains no private land.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire, insects and disease are minor impacts.

2. Insect and Disease

Potential for insect infestation and disease in timber is relatively low.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

This roadless area is approximately 75 miles from the Lee Metcalf Wilderness Area, which receives moderate use. It is a long distance from major population centers with the closest centers over 30,000 population being Butte, Bozeman, and Idaho Falls.

2. Contribution to Wilderness Preservation System

Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.

3. Public Interest

The Goat Mountain Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land management planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Environmental Impact Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in 1-944. Instead, publics who directed response specifically to this area were in favor of nonwilderness management because the area had no special wilderness qualities, and was roaded. A significant attribute of the area is that fact that it is contiuous with a larger tract of land on the Salmon National Forest (13944).

In response to the 1985 Revised Draft EIS and Proposed Plan Supplement, the Beaverhead Forest portion of the Goat Mountain Roadless Area by itself drew little support for wilderness designation; however, there were some commentors, primarily those from Idaho, who supported designation of the combined Salmon-Beaverhead Roadless Area. They based their recommendation on wildlife and roadless recreation values.

Other commentors, primarily those from the Big Hole Valley, opposed wilderness designation of this and other areas in the Big Hole. These commentors did not necessarily support roading for timber harvest in the area but, rather, expressed support for the lands surrounding the Big Hole Valley to remain "as is." Some commentors expressed support for timber harvest, where appropriate, in the area.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Goat Mountain Roadless Area (1-944)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Salmon NF										
Wilderness:	0	0	35,488	0	0	10,706	0	35,488	0	
Nonwilderness:	35,488	35,488	0	35,488	35,488	24,782	35,488	0	35,488	
Beaverhead NF										
Group 1: 1/	0	0	9454	0	0	0	0	9454	0	0
Group 2: 2/	1040	1513	0	95	5861	284	1134	0	756	1245
Group 3: 3/	0	756	0	0	0	283	0	0	284	0
Group 4: 4/	0	6334	0	9076	3214	8320	7563	0	6240	6990
Group 5: 5/:	8414	851	0	283	379	567	757	0	2174	1219
Beaverhead NF Total:	9454	9454	9454	9454	9454	9454	9454	9454	9454	9454
Salmon NF Total:	35,488	35,488	35,488	35,488	35,488	35,488	35,488	35,488	35,488	
ROADLESS AREA TOTAL:	44,942	44,942	44,942	44,942	44,942	44,942	44,942	44,942	44,942	44,942

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* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis, Beaverhead Portion*

Management Emphasis	Alternative (Net Acres) A CD**	B	C	D	F	G	H	I	W	S PA***
Roaded:										
Decade 1	464	533	0	0	570	684	410	0	3070	410
Decade 5****	1480	1773	0	0	9454	754	1584	0	3070	1584
Roadless:										
Decade 1	8990	8921	0	9454	8884	8770	9044	0	6384	9044
Decade 5****	7974	7681	0	9454	0	8700	7870	0	6384	7870
Wilderness:	0	0	9454	0	0	0	0	9454	0	0

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* The Summary of Management Emphasis for the Salmon Portion of Roadless Area 1-944 is not displayed, because that Forest has not yet finalized its alternatives. Only the wilderness/nonwilderness question has been addressed. For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Salmon National Forest portion of Area 1-944, refer to the Salmon Impact discussion beginning on page C-517 of this document.
** CD is the Current Direction Alternative.
*** PA is the Proposed Action Alternative.
**** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

(The following information is specific to the Beaverhead National Forest portion of this roadless area. The detailed discussion of the Salmon National Forest portion of this roadless area immediately follows the Beaverhead discussion in this document.)

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Goat Mountain Roadless Area (1-944) is designated wilderness in Alternatives C and I.

Wilderness can enhance the area's wilderness attributes since these are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. The Goat Mountain roadless area currently has motor travel restrictions. One designated route along the divide between Black Canyon and Bear Creek allows yearlong motor vehicle use. The remainder of the area is closed to motor vehicle use yearlong except snowmobile use is permitted from December 1st to May 15th. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without 4 x 4, snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 4602 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 24 MMBF in standing volume.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 973 AUM's, could continue on the portions of the 4 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands. This area is included with the Salmon National Forest in the "Wolf Coordination Study" and there are numerous locations to lithic scatterings.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor. The area can be seen from highway 324. Highway 324 is not completely paved and does not receive much traffic.
>
> Existing elk security cover is important in this area because of scattered patches of timber and grassland. Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> The absence of timber activities under this designation will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. There will be acreages of essentially even-aged lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age, and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce, and Douglas-fir.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes timber harvest and mineral development, the related industries would not be supported by this emphasis. Timber supply, Forest-wide, would drop slightly resulting in a loss of jobs and income. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 12 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 2240 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Goat Mountain Roadless Area (1-944) are assigned these prescriptions in all Alternatives except I; from as little as 1 percent in Alternative D to 62 percent in Alternative F.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.

In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.

Elk security cover is important to this area. Elk security will be reduced if existing stands are removed from cover capability. Long-term impacts would tend to stabilize at a slightly lower level of security cover than currently exists. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In areas where modification/maximum modification visual quality objectives are applied, extensive timber harvest will bring about a greater distribution of age and size classes. However, this harvesting will tend to perpetuate and increase lodgepole pine dominance.

In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

These prescriptions provide some jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of wildlife, minerals, timber, recreation, grazing, and wilderness. Timber and mineral resources would be available, thus supporting the wood products and minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Small portions of the Goat Mountain Roadless Area (1-944) are assigned these prescriptions in Alternatives B, G, and W; 3 percent is assigned in Alternatives G and W; 8 percent in Alternative B.

The Goat Mountain Roadless Area is part of a motor travel restricted area. Vehicles are restricted to a designated route along the divide between Bear Creek and Black Canyon yearlong. Snowmobiles are permitted from December 1st to May 15th only.

With permittee cooperation there could be some increased opportunities for range management under these prescriptions. Some additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

Visual quality will be retention or partial retention. Although vegetative manipulation may involve prescribed burning, the effects are short-term and visual quality could be easily reclaimed by eliminating the use and allowing the vegetation to regrow.

Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.

Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.

On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

Portions of the Goat Mountain Roadless Area (1-944) are assigned these prescriptions in all Alternatives except A, C and I; from 34% in Alternative F to 96 percent in Alternative D.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

The Goat Mountain roadless area currently has motor travel restrictions. One designated route along the divide between Black Canyon and Bear Creek allows yearlong motor vehicle use. The remainder of the area is closed to motor vehicle use yearlong except snowmobile use is permitted from December 1st to May 15th.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land which is unavailable could affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Goat Mountain Roadless Area (1-944) are assigned these prescriptions in all Alternatives except C and I; from as little as 3 percent in Alternative D to 89 percent in Alternative A.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term.

The Goat Mountain roadless area currently has motor travel restrictions. One designated route along the divide between Black Canyon and Bear Creek allows yearlong motor vehicle use. The remainder of the area is closed to motor vehicle use yearlong except snowmobile use is permitted from December 1st to May 15th.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

This area is included with the Salmon National Forest in the "Wolf Coordination Study" and there are numerous locations of lithic scatterings.

On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could slightly affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 13944	Gross Acres	Net Acres
13944 Goat Mt.(Salmon)	35,488	35,468
1-944 Goat Mt.(Bvhd.)	9,454	9,454
Total	44,942	44,922

I. DESCRIPTION (Salmon National Forest)

The Goat Mountain Roadless Area is shared by the Salmon National Forest in Region 4 and the Beaverhead National Forest in Region 1. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The Goat Mountain Roadless Area is approximately 30 air miles southeast of Salmon, Idaho, and three air miles north of Leadore. The area is bounded on the south and east by the Forest boundary, on the north by the Idaho-Montana border and by the Grizzly Hill road (012) along the border, on the east by State Highway 29. Access to the area can be gained from these roads.

The area is dissected by one major stream, Little Eightmile Creek, aned numerous smaller streams. The highest point in the roadless area is 9,900 feet at Goat Mountain, the low point is 6,200 feet above sea level. The topography of the area is broad, rounded ridges with slopes ranging from 20 to 50 percent. The headlands of Little Eightmile Creek are rugged alpine glaciated topography. Average annual precipitation of 15 to 20 inches occurs mostly as snow. Temperatures vary from summer highs of 80 to 90 degrees, to 40 below zero in the winter. Sedimentary limestone bedrock forms the loamy textured soils of this area, much of which is covered with sagebrush and grass. Lodgepole pine occurs at the higher elevations and Douglas-fir patches are scattered throughout the area. The ecosystems that occur in the area are western spruce-fir and sagebrush.

Recreation use estimated at 2,800 RVD's in 1982 is primarily related to hunting and off-road vehicles.

The unit is contiguous with roadless lands on the Beaverhead National Forest along its northeast side (#01944).

The unit contains some outstanding scenery, particularly in the vicinity of Goat Mountain, East and West Peak, and Railroad Canyon. The Continental Divide National Scenic Trail corridor passes through this roadless area.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Man's influence on the natural integrity of this unit has been very low except in some areas near Grizzly Hill, where mining exploration has scarred the landscape. The impacts that exist are long-term in nature, but are limited to a small percentage of the unit. This unit would be apparently natural to most visitors, but there are impacts that would be apparent to some.

B. OPPORTUNITIES FOR SOLITUDE

The area provides moderate opportunity for solitude due to moderate size, little topographic or vegetative screening, moderate distance from core to perimeter and the existence of some permanent off-site intrusions.

C. PRIMITIVE RECREATION OPPORTUNITIES

The area provides a low opportunity for primitive recreation. Opportunities for challenging experiences or encountering serious hazards are rare.

D. OTHER FEATURES

This area may have the endangered gray wolf present. The presence of the wolf has not been confirmed, but evidence is such that it is included in the "Wolf Coordination Area" with the Beaverhead National Forest. Activities in the area are evaluated for possible impacts to the wolf.

E. MANAGEABILITY AND BOUNDARIES

Logical and manageable boundaries could be developed for the area, but boundary changes would be necessary to delete existing intrusions. Size is not a factor with this area.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-944 Salmon VALUE	1-944 Bvhd VALUE	COMBINED VALUE
Acres				
Gross	Acres	35,488	9454	44,942
Net	Acres	35,468	9454	44,922
Recreation				
Primitive	RVD's	0	119	119
SPNM	RVD's	1000	174	1174
SPM	RVD's	1800	172	1972
Range				
Existing obligated suitable	Acres	9994	4395	14,389
Allotments	# of	4	4	8
AUM's	AUM's	2653	973	3626
Existing vacant suitable	Acres	0	0	0
Allotments	# of	0	0	0
Proposed vacant suitable	Acres	10,182	0	10,182
AUM's	AUM's	2980	0	2980

Resource Potentials (continued)

Timber				
Tentative suitable	Acres	2810	4602	7412
Standing Volume	MBF	15,080	23,659	38,739
Corridors				
Existing/Potential	# of	0	0	0
Wildlife T&E				
Bald Eagle	Acres	0	0	0
Big Game				
Winter Habitat	Acres	16,640	1878	18,518
Summer Habitat	Acres	35,468	*	35,468
Elk				
Winter Habitat	Acres	16,640	1508	18,148
Summer Habitat	Acres	30,436	*	30,436
Deer				
Winter Habitat	Acres	4500	0	4500
Summer Habitat	Acres	35,468	*	35,468
Significant Fisheries				
Stream Miles	Miles	2	4.1	6.1
Stream Habitat	Acres	2.2	.6	2.8
Lakes	# of	1	1	2
Lake Habitat	Acres	2	1	3
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	0	0	0
High	Acres	35,468	9454	44,922
Moderate	Acres	0	0	0
Low	Acres	0	0	0
Claims	# of	204	12	216
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	0	9454	9454
Low	Acres	35,468**	0	35,468
Oil and Gas Leases				
Leased area	Acres	2000	2240	4240
Leases	# of	1	*	1

*Not available

**Rating also includes uranium, geothermal and other energy resources.

1. Recreation

Recreation use associated with the Continental Divide National Scenic Trail will increase as implementation of the trail proceeds. Hunting use could be expected to decline somewhat should motorized use of the area be prohibited. Recreation use was estimated at 2,800 RVD's in 1982 and is primarily related to hunting and off road vehicles.

2. Wildlife

The lower elevations of this area comprise a large block of key big game winter range, particularly in the Little Eightmile drainage. The drainage is also important to waterfowl in that the numerous basin potholes are used for nesting and brood-rearing. Approximately 400-450 antelope migrate through the Railroad Canyon portion each spring and fall, and mule deer migrate through the Little Eightmile-Grizzly Hill country. Sage grouse, chukars and blue grouse are found here; prairie falcons and golden eagles commonly nest in this area, and moose are occasionally observed. A small herd (8-10 animals) of mountain goats inhabit Goat Mountain.

Only one small stream within the area contains habitat presently supporting fish, and it has moderate to high channel gradients. Cutthroat trout are found in the stream. There is also one water storage pond located within the Little Eightmile drainage that provides habitat for fish. Present fishing use is very light.

3. Water

The area includes several small drainages with headwaters along the Continental Divide. Many of the streams are intermittent. Water which does leave the Forest is used for irrigation of ranch lands. Water quality is generally good, however, a few localized disturbances have been identified which resulted from past management practices. All streams are within the Lemhi River drainage.

4. Livestock Operations

Three grazing allotments are entirely within the roadless area, and the Grizzly Hill Allotment is partially in the area. The Peterson Creek, Little Eightmile, and Grizzly Hill cattle and horse allotments provide about 2,650 AUM's of cattle use each year; whereas the Mollie Gulch sheep and goat allotment is grazed by 1,200 sheep and contributes approximately 400 AUM's of permitted use. Located within the boundary of the roadless area are 15 water developments and 329 miles of fence. Although a small amount of excellent and poor condition range exists, the majority of the suitable range is rated as good and fair.

5. Ecology

There are no known areas of ecological significance.

6. Timber

An estimated 51.6 million board feet of sawtimber growing stock volume within the area have an estimated annual potential yield of .5 million board feet. A 1.074 million board feet timber sale was sold in this roadless area in 1980. No other sales are planned within the area at this time.

7. Minerals/Oil and Gas

The hardrock mineral potential of this area was rated high in the RARE II evaluation, and no new data modifies the original rating. Past mineral production from this area includes silver, gold, copper, lead and zinc. There is one patented mining claim within the area. Mining claim owners continue to do assessment work, with some expanding activities on their claims. There are no active mining operations at this time within the roadless area. Oil and gas potential for this area is considered moderate. There is no known potential for other currently leasable minerals. There are currently one oil and gas lease and two oil and gas lease applications pending.

8. Cultural Resources

Prehistoric and historic cultural resources are known to exist within this unit, but their significance has not been determined.

9. Land Use Authorizations

This roadless area includes six separate special use permits for mining access roads totaling about 10.5 miles. There is an electronic communications site permitted adjacent to the intrusion area and the State of Idaho has requested an additional electronic site inside the area. Four-tenths mile of permitted system road and .6 mile of permitted powerline (12.5 KV) are also within the intrusion. About 4.3 miles of the power line are outside of the intrusion. The area has previously been (but is not now) used for outfitter and guide purposes. There are 8.5 miles of system trail, 13.7 miles of non-system horse and jeep trail, and 3.5 miles of old railroad bed within the area. Approximately 6.2 miles of the Continental Divide Trail are within the northeast perimeter of the area.

10. Non-Federal Lands

There is one tract of private land at the Commodore Mine totaling 19.5 acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire occurrence is light.

2. Insect and Disease

Since most of the area contains high elevation nontimber types and sagebrush grass types, disease considerations are minimal.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers

The unit is located approximately 90 road miles from the River of No Return Wilderness. Use of this wilderness ranges from low to high depending on the particular area. The roadless area is located approximately 40 miles from Salmon, Idaho; 100 miles from Idaho Falls, Idaho; and 170 miles from Missoula, Montana.

2. Contribution to Wilderness Preservation System

The area does not represent any unique ecosystems.

3. Public Interest

During RARE I this area was inventoried as the Beaverhead III Roadless Area #295. The decision in the RARE I FEIS was to manage this area for nonwilderness resource development. Public opinion received on the area during RARE I, wilderness/nonwilderness, was against further sutdy for wilderness. The area was not considered highly controversial during RARE I.

The Beaverhead III Roadless Area #295 was inventoried and evaluated in RARE II as the Goat Mountain Roadless Area #01-944. During RARE II public opinion was against further study for wilderness and the wilderness/nonwilderness issue was not highly controversial. The area is contiguous with roadless lands on the Beaverhead NF in Montana and the area has not been as issue on the Beaverhead.

Senator McClure held "Idaho Forest Management Act" hearings in Coeur d'Alene, Lewiston, Boise, and Idaho Falls during August 1983. Prior to these meetings the Senator sent out a constituent letter with four proposals; i.e., the Forest Service RARE II, Forest Industries, other commodity user groups, and the 1979 Idaho Wildlife Federation proposal. Following the hearings, Senator McClure received additional input from environmental groups and the Governor of Idaho. The environmental groups and Governor Evans have not included this area in their proposals. The Idaho Fish and Game Commission provided input to Governor Evans for both wilderness and roadless management areas over the State. They did not include this area in their proposal.

During the Forest Planning review of inventoried roadless lands, public opinion was again divided ranging from no wilderness to all wilderness. The Idaho Wildlife Federation (IWF) and Idaho Outfitters and Guides Association (IOGA) recommended a "Reserved" status for the area which is basically development only if it can be done without impairing environmental values. The Idaho Environmental Council supported the IWF and IOGA recommendations. Earth First! recommended wilderness. The Idaho Mining Association, Idaho Cattlemen's Association, Outdoors Unlimited, Idaho Farm Bureau, Idaho Wool Growers, Idaho Trail Machine Association, Idaho Forest Industries Council, and Idaho Women in Timber all recommended no wilderness for Goat Mountain. No recommendations were received from Governor Evans, the Idaho Wildlands Defense Coalition, or the Idaho Fish and Game Commission. The wilderness/nonwilderness issue on Goat Mountain generated a relatively low level of controversy during Forest Plan review of roadless areas.

Senator McClure has introduced the Idaho Forest Management Act in the Senate. The Goat Mountain Roadless Area was not included in this proposed wilderness legislation.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Prescription Assignment by Alternative for the Salmon portion of the Goat Mountain Roadless Area.

Alternatives	Wilderness	Non-Wilderness Roaded	Unroaded
1	0	35,488	0
2	10,706	24,782	0
3	0	0	35,488
4	0	35,488	0
5	0	35,488	0
6	0	35,488	0
7	0	0	35,488
8	0	0	35,488
9	35,488	0	0
10	35,488	0	0
11	35,488	0	0
12	0	35,488	0

(There will be a detailed discussion of the above alternatives in the Salmon National Forest Draft EIS when it is published.)

B. Impacts

The following information is specific to the Salmon National Forest portion of this roadless area. The detailed discussion of the Beaverhead National Forest portion of this roadless area immediately precedes the Salmon discussion in this document.

1. Designation Wilderness
   Management Prescription: Wilderness

A wilderness management prescription was considered on 35,488 acres in Alternatives 9, 10, 11, and on 10,706 acres in Alternative 2.

Wilderness designation would enhance the recreation opportunities of those visitors seeking a nonmotorized wilderness type experience. It would curtail, however, the opportunities of those visitors who desire to use motorized means, primarily trail bikes and snowmobiles, to access the area. A high percentage of the current use in this area is related to use of motorized vehicles.

Under wilderness management, recreation use would continue to be dominated by big game hunting.

The Recreation Opportunity Spectrum classification for that portion considered for wilderness would be Semi-primitive Nonmotorized.

Visual Quality would be preserved in those portions managed as wilderness.

The habitat potential for elk would be approximately 35 animals for Alternatives 9, 10, 11, and 29 animals for Alternative 2. Habitat potential for mule deer in Alternatives 2, 9, 10, and 11 is approximately 330 animals.

Alternatives 2, 9, 10, and 11 all have similar fish production potentials at near natural levels. Even though Alternative 2;s acreage is substantially reduced, fishery values would be maintained at a high level because of location.

Livestock grazing is a major resource use of the area and would continue to be for all alternatives. The wilderness management prescription of 35,488 acres considered in Alternatives 9, 10, and 11 would result in essentially the same level of livestock management and number of permitted AUM's that currently exist. Under Alternative 9 there would be a slight reduction in AUM's from the currently permitted level of 2653 to 2580 AUM's. The 10,706 acres of wilderness considered in the market alternative (#2) would have little or no affect in developing and implementing a more intensive livestock management plan, as the bulk of the development activities would occur in areas outside of those identified for wilderness consideration. Under Alternative 2, permitted AUM's would increase from 2653 to 3111.

The entire area would be designated wilderness in Alternatives 9, 10 and 11 with the result that all 2810 acres of suitable timberland would become not available for timber harvest. The inclusion of this suitable timberland in wilderness would have no significant effect on total forest timber outputs.

The areas evaluated for wilderness would be unavailable for mineral development, except for the possibility that some or all of the existing claims prove to merit development. There are 204 existing mining claims in the area considered in Alternatives 9, 10, and 11 and 29 in the area considered in Alternative 2. These areas have a high hardrock mineral potential and a low oil and gas potential.

2. Designation: Nonwilderness
   Management Prescription: Nonwilderness/Roaded

   Nonwilderness roaded management was considered on 35,488 acres in Alternatives 1, 4, 5, 6, and 12, and on 24,782 acres in Alternative 2.

   Under this management prescription, recreation use would continue to be dominated by big game hunting.

   The Recreation Opportunity Spectrum classification would be roaded Natural where roads are actually constructed, but would remain Semi-primitive Motorized throughout most of the area.

Visual Quality would be retained throughout most of the area with lesser amounts of partial retention.

Elk habitat potential would drop to approximately 16 animals. Mule deer would remain at approximately 330 animals.

Because of management objectives, fish production could be significantly different. Alternatives 1, 2, 4, 6, and 12 would maintain production levels necessary to meet State goals (80% of potential). Alternative 5 would be constrained at MVP levels equal to 60 percent of potential.

Suitable range and permitted AUM's would increase in Alternatives 1, 2, 4, 5, 6, 7, and 12. Slight decreases in permitted AUM's would occur in Alternatives 3, 8, and 9 because of the level of livestock management intensity. Alternatives 10 and 11 would remain unchanged from the existing situation.

Designation as nonwilderness would generally forego wilderness designation after the fourth of fifth decade in any of these alternatives.

Mineral activities would not be effected. The entire area would be available for exploration and development.

3. Designation: Nonwilderness
   Management Prescription: Nonwilderness/Unroaded

Nonwilderness unroaded management was considered on 35,488 acres in Alternatives 3, 7, and 8.

Recreation use would continue to be donimated by big game hunting primarily by motorized means.

The Recreation Opportunity Spectrum classification would be Semi-primitive Motorized, allowing for all current uses such as trail bike and snowmobile riding.

Visual Quality would be retained in those portions designated for unroaded management.

Fish production would remain at near natural levels.

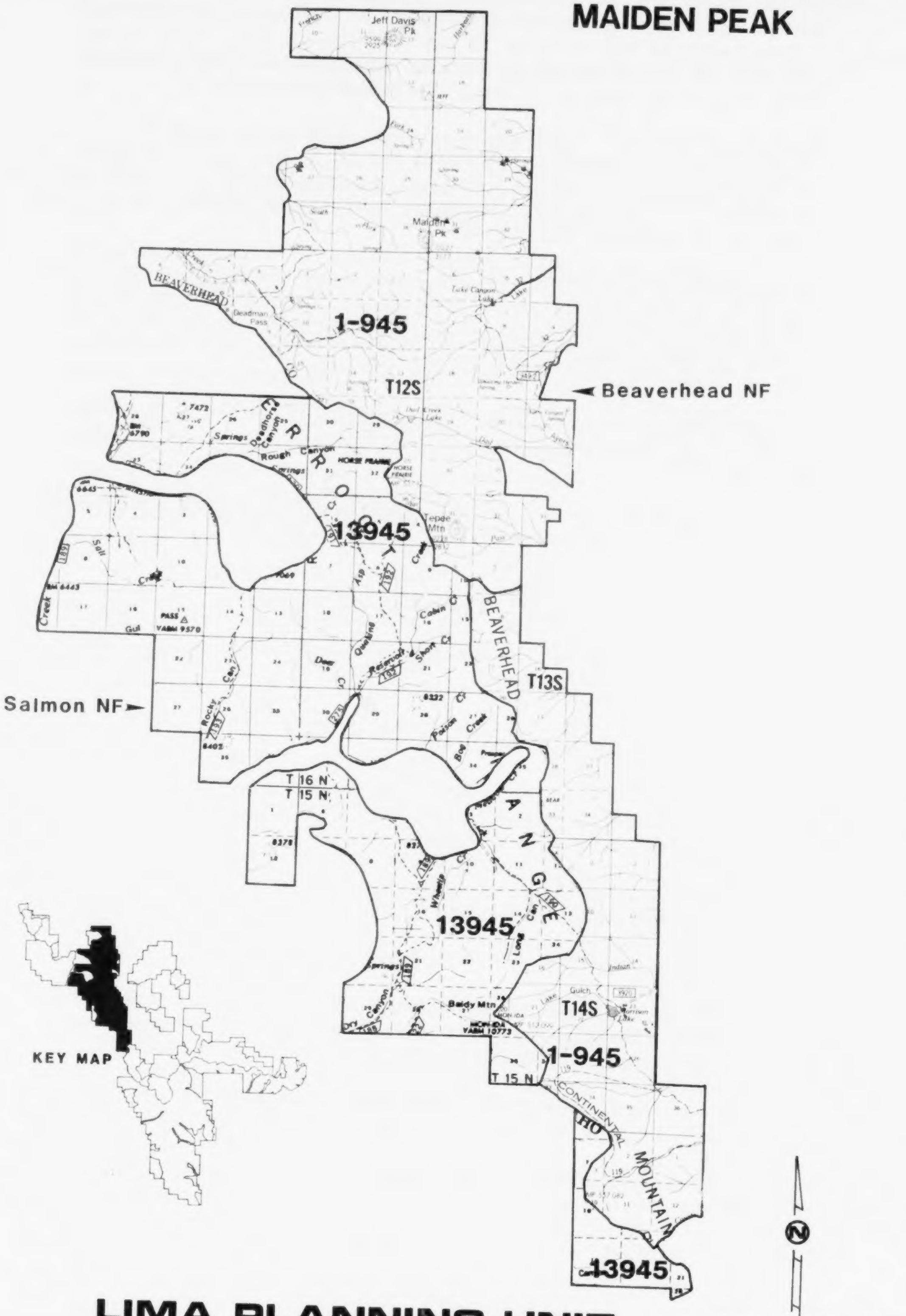
With the exception of Alternative 5 (High RPA) and unroaded management prescription would have little affect on management intensity or permitted AUM's. As a result of the unroaded prescription, some reseeding activity proposed in Alternative 5 would need to be foregone. Approximately 200 AUM's of permitted use would be tied to this activity.

No unroaded management prescription would significantly effect timber in any alternative.

Mineral activity would not be effected.

ROADLESS AREA 1-945

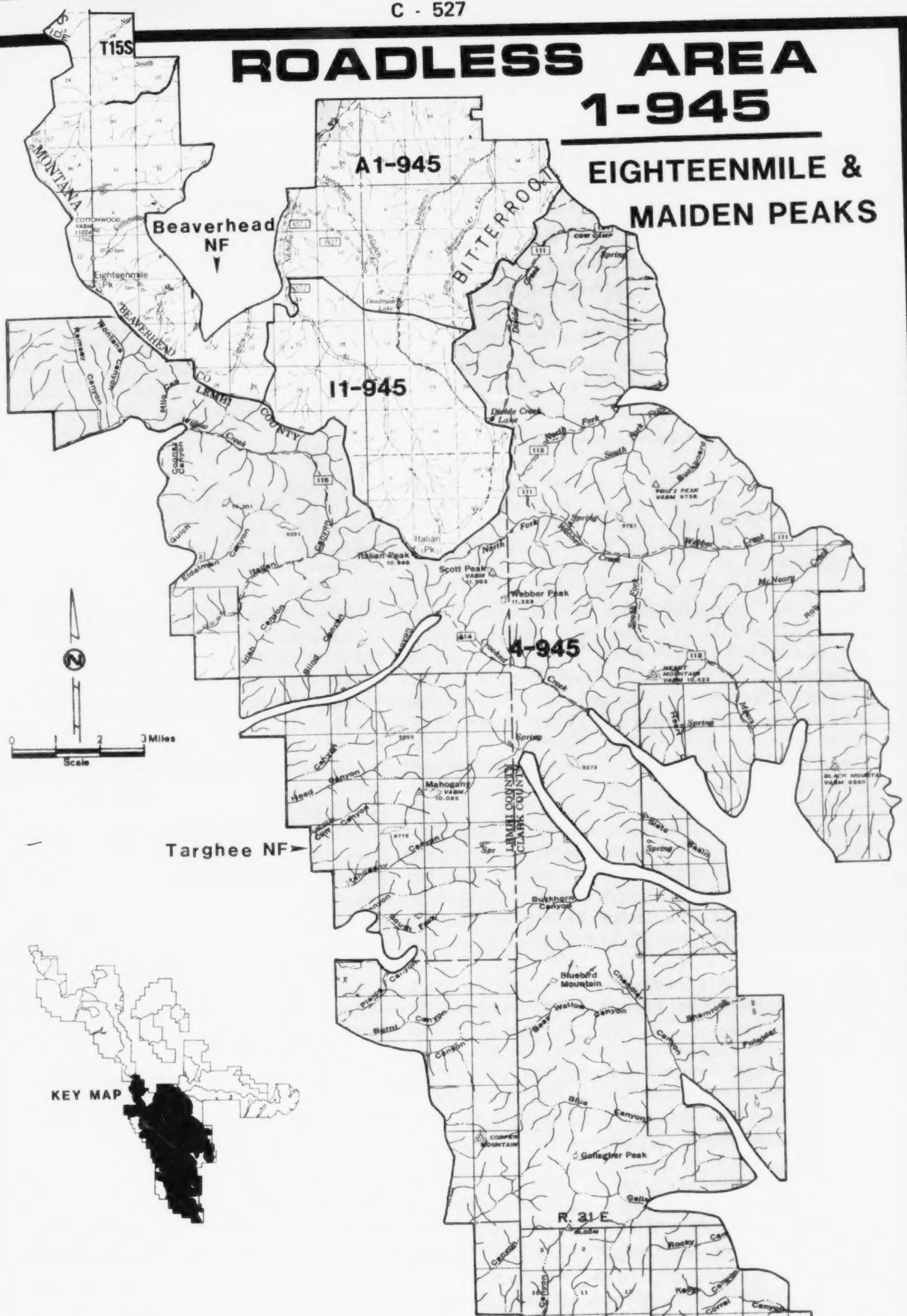
MAIDEN PEAK


Jeff Davis Pk
Maiden Pk
Lake Canyon Lake
BEAVERHEAD
Deadman Pass
1-945
T12S
Beaverhead NF
Springs
Deadhorse Canyon
Rough Canyon
Horse Prairie
13945
Tepee Mtn
Salt Creek
Gul
PASS VABM 9570
Cabin Cr
Short Cr
Reservoir
Deer
BEAVERHEAD
T13S
Salmon NF
Rocky Can
Poison Cr
Bell Creek
T 16 N
T 15 N
13945
Baldy Mtn
T14S
1-945
T 15 N
CONTINENTAL
MOUNTAIN
13945
KEY MAP
N
0
1
2
3 Miles
Scale

LIMA PLANNING UNIT

ROADLESS AREA 1-945

EIGHTEENMILE & MAIDEN PEAKS


T15S
MONTANA
BEAVERHEAD
Beaverhead NF
Eighteenmile Pk
A1-945
BITTERROOT
I1-945
LEMHI COUNTY
Divide Creek Lake
Italian Pk
Italian Peak
Scott Peak
Webber Peak
4-945
Webber Creek
McNeary
Heart Mountain
Black Mountain
Mahogany
Targhee NF
LEMHI COUNTY
CLARK COUNTY
Buckhorn Canyon
Bluebird Mountain
Copper Mountain
Gallagher Peak
R. 31 E.
Scale
0
1
2
3 Miles
KEY MAP

LIMA PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name:	1-945		Gross Acres	Net Acres
	1-945	Maiden Peak	50,116	50,116
	A1-945	Eighteenmile Peak	28,175	27,815
	I1-945	Italian Peak	12,986	12,986
	4-495	Italian Peak (Targhee)	146,300	146,300
	13945	Italian Peak (Salmon)	50,181	50,033
	Total		287,758	287.250

I. DESCRIPTION (Beaverhead National Forest)

Roadless area X1-945 is shared by the Beaverhead National Forest in Region 1 and the Salmon and Targhee National Forests in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

Area 1-945 is located approximately 25 miles west of Lima, Montana and is accessed by low standard dirt roads from the County road up Medicine Lodge Creek and the Horse Prairie Highway. The Continental Divide forms the southwest boundary of this area. This portion of the Divide is a narrow, gently sloping, grassy ridgetop. A short range of mountains extends north from the Divide to Jeff Davis Peak, separating the Horse Prairie and Medicine Lodge drainages. The Horse Prairie side is well-dissected, with most of the land area in moderately steep valley sideslopes. The Medicine Lodge side of this range has been lightly glaciated, and small glacial cirques occupy the heads of most drainages. Mid-elevation slopes are moderately steep. South of Tepee Mountain the narrow gentle ridge of the Continental Divide is flanked by steep, dry slopes that terminate abruptly on the footslopes of the Medicine Lodge Valley. Morrison Lake occurs on the edge of a large glacial moraine. Most of the Divide south of Morrison Lake follows a sharp ridge with precipitous, rocky cirque headwalls facing the Medicine Lodge Valley to the northeast. Baldy Mountain dominates the mountain scenery at 10,773 feet.

Area A1-945 (Eighteenmile Peak) is located directly south of the previously described roadless area and is accessed from gravel roads off the County road at Big Sheep Creek. The Continental Divide continues along the west and south sides of this region with similar mountainous topography. The area terminates near Medicine Lodge Pass and the road which separates it from Roadless Area 1-961. Near Medicine Lodge Pass, the Divide follows a gently sloping ridge. Major drainages include Deadman, Henderson and Meadow Creeks. Eighteenmile Peak: 11,141 feet.

Area I1-945 (Italian Peak) lies in the headwaters of Nicholia Creek and is surrounded on three sides by the Continental Divide. The head of Nicholia Creek occupies a large, undulating cirque basin, bounded by precipitous glacial cirque headwalls. The highest point in this roadless area is Italian Peak at 10,998 feet.

On the uplands, soils are shallow and rocky silt loams. In the valley basins, soils are deep, dark colored silt loams. Stony clay loams developed in glacial tilt occur along the footslopes. Shallow, rocky soils, with thin silt loam surfaces, occur along the Continental Divide. These soils are developed in limestone, quartzite and volcanic rock. Soils in the upper reaches of Nicholia and Deadman Creeks are derived from limestone (I1-945).

Vegetation at low elevations and on south-facing slopes is grassland and sagebrush/grassland, with small patches of Douglas-fir. North-facing slopes at mid-elevations contain small patches of forest, mostly lodgepole pine and Douglas-fir, plus some subalpine fir and Engelmann spruce. Whitebark pine is the dominant species at higher elevations. Subalpine grassland and alpine vegetation grow at the higher elevations.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

The natural integrity of area 1-945 has been impacted by the range management activities. The natural appearance is altered by 4x4 trails and structural range improvements. Wilderness opportunities are somewhat impaired by narrowness of the 1-945 area; however, it is surrounded by asparsely populated, rural community. The natural integrity of areas 1-945 and A1-945 have relatively low to medium values for wilderness due to the presence of range developments and low standard roads. Extensive range developments and lack of diversity are major items influencing solitude and primitive recreation and in reducing value for wilderness.

The natural integrity of area A1-945 has also been impacted by range management activities. The natural appearance is altered by 4x4 trails, low standard roads, and range improvements.

Area I1-945 contains high values for wilderness designation. There are large slopes with impressive geological formations of faults, overlays and cliffs that offer panoramic views of adjacent valleys. It also provides mountain goat habitat and a summer refuge for elk. The surrounding area is a sparsely populated, rural community with adjacency to a large area in Idaho that is being studied for a possible wilderness classification.

Because much of I1-945 is mountainous, it has remained relatively natural in appearance. Although some 4x4 trails do exist, these impacts could be mitigated through travel plan restrictions for the area.

B. OPPORTUNITIES FOR SOLITUDE

Size is a major factor contributing to the opportunities for solitude in this roadless area. Topographic and vegetative screening are somewhat limited in the upper reaches of the area, but the topography becomes more diverse and rugged toward the south and westerly portions of the area, contributing significantly to opportunities for solitude in these areas.

Areas 1-945 and A1-945 have low standard and four-wheel-drive roads that impact the opportunities for solitude in much of them. However, portions of the areas are mountainouse, and vegetative screening at the higher elevations provides some opportunities for solitude.

Area I1-945 has diversity of topography that contributes significantly to opportunities for solitude. Area I1-945, when considered with the Idaho portion, gives ample opportunity for solitude and primitive recreation.

Solitude is more available in some parts of the area than in others. Popular trails, including the Continental Divide Trail, follow the west and south boundaries of Area 1-945.

C. PRIMITIVE RECREATION OPPORTUNITIES

Extensive range developments and numerous low-standard and four-wheel-drive roads contribute significantly to the low-to-moderate values for primitive recreation for the area as a whole. As one travels toward the Continental Divide; however, opportunities for primitive recreation, particularly hiking and mountain climbing, become more prevalent.

Areas 1-945 and A1-945 have extensive range developments and low-standard and 4x4 roads, thereby limiting primitive recreation opportunities there.

Area I1-945 has rugged peaks and steep slopes that contribute to the opportunities for hiking and mountain climbing. Impressive formations of faults, overlays and cliffs provide challenging experiences for the visitor. Hunting is the major recreational use of the area, although there is snowmobile access to the area in the winter.

D. OTHER FEATURES

High points within the areas and along the Continental Divide offer panoramic views of adjacent valleys.

E. MANAGEABILITY AND BOUNDARIES

The size of the area would be adequate for wilderness, but it would be very difficult to combine the areas because of the roads separating them. Area 1-945 is a long, narrow unit, less than two miles wide in places. It is adjacent on both sides to BLM or private lands with a sparsely populated, rural community. Area I1-945 is being studied as a Further Planning Area and is contiguous to another roadless area (1-945) on the Targhee National Forest, which enhances the depth and wilderness values of this region. Area I1-945 contains the southernmost point in Montana.

1977 Inventory Acres:	40,136 gross	40,136
1983 Inventory Acres:	91,277	90,917
Change	+ 51,141	+ 50,781
Reason for change in inventory acres;		
Addition of Unit Plan roadless	+ 41,714	+ 41,354
Acreage Recalculation	+ 9,427	+ 9,427

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-945 VALUE	A1-945 VALUE	11-945 VALUE	4-495 VALUE(Targ.)	1-3945 VALUE(Salm.)	COMBINED VALUE
Acres							
Gross	Acres	50,116	28,175	12,986	146,300	50,181	287,758
Net	Acres	50,116	27,815	12,986	146,300	50,033	287,250
Recreation							
Primitive	RVD's	634	110	163	*	0	907
SPNM	RVD's	923	154	237	*	0	1314
SPM	RVD's	913	163	235	*	5700	7011
Roaded Natural	RVD's	*	*	*	*	3700	3700
Range							
Existing obligated suitable	Acres	20,494	24,448	4762	124,200	17,851	191,755
Allotments	# of	7	6	2	19	4	36**
AUM's	AUM's	6508	3866	454	10,300	7112	28,240
Exist. Vacant Suit.	Acres	0	0	0	*	0	0
Allotments	# of	0	0	0	*	0	0
Prop. Suit. Vacant	Acres	*	*	*	*	18,100	18,100
AUM's	AUM's	*	*	*	*	7500	7500
Timber							
Tentative suitable	Acres	13,591	2118	1616	*	7951	25,276
Standing Volume	MBF	71,258	8789	6622	*	59,000	145,669
Corridors							
Existing/Potential	# of	0	1	0	0	1	2
Wildlife T&E							
Bald Eagle	Acres	0	0	0	*	0	0
Gray Wolf	Acres	*	*	*	*	0	0
Big Game							
Winter Habitat	Acres	11,763	2518	5113	42,300***	5120	66,814
Summer Habitat	Acres	*	*	*	***	50,033	50,033
Elk							
Winter Habitat	Acres	2044	787	0	*	5120	7951
Summer Habitat	Acres	*	*	*	*	50,033	50,033
Deer							
Winter Habitat	Acres	30	0	0	*	2560	2590
Summer Habitat	Acres	*	*	*	*	50,033	50,033
Significant Fisheries							
Stream Miles	Miles	17.1	29.4	15.3	38	6.1	105.9
Stream Habitat	Acres	4.6	16.1	11.2	*	5.4	37.3
Lakes	# of	9	6	0	*	1	16
Lake Habitat	Acres	40	12	0	20	10	82
Water Developments							
Existing	# of	0	0	0	0	47	47
Minerals							
Very High	Acres	0	0	0	146,300	0	146,300
High	Acres	7526	0	0	0	50,033	57,559
Moderate	Acres	42,590	27,815	12,986	0	0	83,391
Low	Acres	0	0	0	0	0	0
Claims	# of	30	0	0	1	190	221
Oil and Gas Potential							
Very High	Acres	0	0	0	0	0	0
High	Acres	50,116	27,815	12,986	0	0	90,917
Moderate	Acres	0	0	0	103,800	0	103,800
Low	Acres	0	0	0	42,500	50,033****	92,533
Oil and Gas Leases							
Leased area	Acres	49.534	16,116	1002	14,300	2150	83,102
Leases	# of	*	*	*	*	1	1

* Not Available

** Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of area.

*** Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk Habitat.

**** Rating also includes uranium, geothermal and other energy resources.

1. Recreation

The potential for recreation in these areas is good. Present use is light because of the sparse population in the surrounding areas. Hunting is the major recreation use, and there are opportunities for fishing in Dad Creek and Morrison Lakes in Area 1-945 (Maiden Peak). The potential for hiking and sightseeing is especially good in the mountainous areas near the Continental Divide. There are no developed sites, but extensive access is available through cross-country 4x4 trails.

Present recreation use of A1-945 is light, but existing potential is high. Area receives some traffic from hunters, prospectors, sightseers, and fishermen at Deadman Lake. There are no developed sites and roads are low standard four-wheel-drive roads. Heaviest use occurs during hunting season.

Area I1-945 is the most remote and majestic of the areas. Vehicle access is limited to snowmobiles and for this reason inhibits other recreational uses. Hunting and sightseeing by hikers are seasonal uses.

2. Wildlife

Mule deer, elk, mountain goat and furbearers common to western Montana occupy 1-945. Elk winter mostly in the northwest portion. Mountain goat habitat is found primarily on high ridges in the vicinity of Maiden Peak and Morrison Lake. The area contains Lake Canyon, Dad Creek and Morrison Lakes, all of which have fishable populations of cutthroat and lake trout. Mountain goat habitat is located in the Morrison Lake area and in the Italian Peaks. Fishable populations of trout inhabit Deadman and Morrison Lakes.

Area A1-945 supports elk, deer, and antelope on summer range.

Area I1-945's wildlife resources are limited to present populations of deer, elk and goat. Some mountain goat habitat is located in the Italian Peak area.

3. Water

Area 1-945 has a high capacity to receive, store and produce water. Natural water turbidity is moderate. Grazing allotment #236 (Lake Canyon) has been reserved in 1-945 as a watershed. There are several lakes in the region. Streams with headwaters in the northwestern portion of Area 1-945 (Maiden Peak) flow into Horse Prairie Creek which, in turn, empty into the Clark Canyon Reservoir south of Dillon. The headwaters of Medicine Lodge Creek lie in the northeastern portion of the Maiden Peak unit, and streams originating in the mountains of A1-495 and I1-945 flow into Big Sheep Creek which empties into the Red Rock River. There are several irrigation ditches constructed in A1-945.

4. Livestock Operations

Most of Areas 1-945 (Maiden Peak) and A1-945 (Eighteen Mile Peak) are grazed by cattle, except for some of the steeper or timbered lands. Primary range occurs as both high alpine grassland and lower foothills containing sagebrush and grass. Cattle and sheep graze the area from early July through the middle of October.

Area 1-945 - Cattle and horses graze these allotments--Maiden Creek #24, Horse Prairie #21, North End #106, Ayers Canyon #79, Medicine Lodge #118, Indian Creek #95 (sheep and goat), and Simpson Creek #112.

Area A1-945 is alloted under the Meadow Creek #102, Big Sheep #262, Trail Creek #116, Henderson Gulch #93, Deadman Lake #84, and Pine Creek #107 permits. Area I1-945 contains two grazing allotments--the Deadman Lake #84 and Big Sheep #262.

5. Ecology

Ecosystems represented at low elevations and on south-facing slopes are grassland and sagebrush/grassland, with small patches of Douglas-fir. North-facing slopes at mid-elevations contain small patches of forest, mostly lodgepole pine and Douglas-fir, plus some subalpine fir and Engelmann spruce. Whitebark pine is the dominant species at higher elevations. Subalpine grassland and alpine vegetation grow at the higher elevations.

6. Timber

Area 1-945 had timber harvesting prior to 1967 that was limited to small quantities of posts, poles, and bridge timbers. A small amount of commercial timber was removed from Keystone Creek since 1967.

Area A1-945 has trees scattered throughout. The chief value of the existing stands is their ability to provide wildlife cover.

Area I1-945 has timber stands that also protect sizeable populations of wildlife. The commercial timber base has been eliminated through past planning decisions. This will probably continue in the future.

7. Minerals/Oil and Gas

Geologic favorability for locatable minerals is high (10%) to moderate (90%). There are some scattered hardrock prospects. Geologic favorability for oil and gas is high. Most of these areas are leased for oil and gas. Part of I1-945 is leased for oil and gas with appropriate wilderness study stipulations.

8. Cultural Resources

Evidences of prehistoric cultural resources are not known.

9. Land Use Authorizations

There are no special land uses authorized for this area.

10. Non-Federal Lands

Area A1-945 has 360 acres of private ownership.

B. MANAGEMENT CONSIDERATIONS

1. Fire

Fire has occurred infrequently in this region as there are no heavy concentrations of timber and resulting downfall.

2. Insect and Disease

Insect infestation and disease are considered minimal in this area due to low amounts of timber.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.

The closest wilderness area is the Anaconda-Pintler Wilderness or the Lee Metcalf Wilderness, both located at considerable distances from 1-945. The area is also quite far from major population centers over 30,000; the closest are Butte, Bozeman and Idaho Falls.

2. Contribution to the Wilderness Preservation System

This area would contribute to the National Wilderness preservation Sustem by providing examples of low and mid-elevation grass and grass-sagebrush steppes, complex vegetative diversity, interesting geological features, and diverse topographic relief.

3. Public Interest

During the RARE I evaluation, 1-945 was composed of several Roadless Areas, #35 (Maiden Peak) #38 (Coyote Creek), and #2 (Italian Peak); in addition, it contained three Essentially Roadless Areas--Horse Prairie, Morrison Lake and Deadman Lake. Area #2 (Italian Peaks) was wholly within a Wilderness Study Area. Although no Essentially Roadless Areas were selected for Wilderness Study Areas in 1973, there were portions that were proposed for further consideration. The Deadman Lake area was included in this identification for study with the Italian Peak Wilderness Study Area.

The Second Roadless Area Review and Evaluation was completed in 1977 and the area was inventoried as roadless. The wilderness potential of the area was evaluated in the land management planning process that was occurring concurrently with RARE II. Public desire for wilderness was expressed for area I1-945 in response to the review of the 1977 Beaverhead Forest DEIS (Draft Impact Environmental Statement) and Forest Plan. Based on a decision made in the Beaverhead 1978 Final EIS, I1-945 became a Further Planning study area in conjunction with the Targhee National Forest.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated that the 20,000 acres of Italian Peaks from the Continental Divide to the proximity of Morrison Lake should be roadless because of high wilderness values.

The Italian Peak Roadless Area was addressed frequently in comments on the 1985 Revised Draft EIS and Forest Plan. The Wilderness Society, the Montana Wilderness Association, and other wilderness- and conservaionist-oriented groups and individuals supported wilderness designation of portions or all of 1-945 on the Beaverhead National Forest. The "Conservationist Alternative", designed by the Wilderness Society, proposed an area of approximately 52,000 acres, considerably larger than the area proposed in the Forest's Draft Plan. They reasoned that their boundary is a "logical extension of the Forest Service recommendation along the Great Divide both directions." In addition they said, "The 52,000-acre boundary would extend to the northwest to join a similar sized roadless area in Idaho."

The oil and gas industry expressed concern that this area has a high potential for these resources and that wilderness designation would severely impact entry, exploration for and development of these resources.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Roadless Area 1-945 (Eighteenmile Peak, Maiden Peak, Italian Peak)

Management Emphases		Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Targhee NF											
Wilderness:		42,500	0	142,300	42,500	142,300	0	42,500	146,300	0	
Nonwilderness:		103,800	146,300	4000	103,800	4000	146,300	103,800	0	146,300	
Salmon NF											
Wilderness:		0	0	50,181	0	0	0	0	50,181	0	
Nonwilderness:		50,181	50,181	0	50,181	50,181	50,181	50,181	0	50,181	
Beaverhead NF											
Group 1: 1/	1-945	0	0	50,116	50,116	0	0	0	50,116	2140	0
	A1-945	0	0	27,815	27,815	27,815	27,815	0	27,815	9742	11,605
	I1-945	12,986***	0	12,986	12,986	12,986	12,986	12,986	12,986	12,986	12,986
Group 2: 2/	1-945	860	2509	0	0	11,038	5017	1690	0	4013	0
	A1-945	557	0	0	0	0	0	0	0	400	0
	I1-945	0	0	0	0	0	0	0	0	0	0
Group 3: 3/	1-945	0	5017	0	0	502	9533	7526	0	8027	2685
	A1-945	0	21,434	0	0	0	0	16,702	0	14,510	12,674
	I1-945	0	0	0	0	0	0	0	0	0	0
Group 4: 4/	1-945	49,256	39,579	0	0	37,573	31,553	39,210	0	29,915	38,655
	A1-945	27,258	5824	0	0	0	0	6938	0	2763	2697
	I1-945	0	12,986	0	0	0	0	0	0	0	0
Group 5: 5/:	1-945	0	3011	0	0	1003	4013	1690	0	6021	8776
	A1-945	0	557	0	0	0	0	4175	0	400	839
	I1-945	0	0	0	0	0	0	0	0	0	0
Beaverhead NF Total:		90,917	90,917	90,917	90,917	90,917	90,917	90,917	90,917	90,917	90,917
Targhee NF Total		146,300	146,300	146,300	146,300	146,300	146,300	146,300	146,300	146,300	
Salmon NF Total:		50,181	50,181	50,181	50,181	50,181	50,181	50,181	50,181	50,181	
ROADLESS AREA TOTAL:		287,398	287,398	287,398	287,398	287,398	287,398	287,398	287,398	287,398	287,398

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
*** Acres shown under wilderness for Alternative A are allocated to Further Planning.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis, Beaverhead Portion*

Management Emphasis	Alternative (Net Acres) A CD**	B	C	D	F	G	H	I	W	S PA***
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5 1/	2047	3889	0	0	18,958	7977	2110	0	6173	0
Roadless:										
Decade 1	90,917	90,917	0	0	50,116	50,116	77,931	0	66,049	66,326
Decade 5 1/	88,870	87,028	0	0	31,158	42,139	75,821	0	59,876	66,326
Wilderness:	0	0	90,917	90,917	40,801	40,801	12,986	90,917	24,868	24,591 2/

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* The Summary of Management Emphasis for the Salmon Portion of Roadless Area 1-945 is not displayed, because that Forest has not yet finalized its alternatives. Only the wilderness/nonwilderness question has been addressed. For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Salmon National Forest portion of Area 1-945, refer to the Salmon Impact discussion beginning on page C-546 of this document. For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Targhee National Forest portion of Area 1-945, refer to the Targhee Impact discussion beginning on page C- of this document.

** CD is the Current Direction Alternative.

*** PA is the Proposed Action Alternative.

1/ The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

2/ For the Proposed Action Alternative, the Italian Peaks Recommended Wilderness area has been expanded to 25,664 acres; 1073 acres of which was not inventoried roadless because its area did not meet the 5000 acre roadless area requirement.

B. Impacts

(The following information is specific to the Beaverhead National Forest portion of this roadless area. The detailed discussion of the Salmon and Targhee National Forest portions of this roadless area immediately follows the Beaverhead discussion in this statement.)

1. Designation: Wilderness
Management Emphasis: Wilderness

Designation: Wilderness

The Maiden Peak/Eighteenmile Peak/Italian Peak Roadless Area (1-945, A and II-945) is designated wilderness in all alternatives except B and A. Alternatives C, D and I designate 100 percent of the area to wilderness; Alternatives F and G, 45 percent; Alternative H, 14 percent. Alternative W designates 27 percent of the area to wilderness, as does Alternative S, the Proposed Action. In Alternative A, the Current Direction Alternative, the RARE II Further Planning part of the Roadless Area (II-945) is assigned to an emphasis which protects the wilderness character much as if that area were assigned to wilderness management.

Italian Peaks area (II-945) currently has travel restrictions that exclude motorized use of the area from April 1 to December 1. The purpose of the restrictions is for erosion control and water quality. Must snowmobile use is on the northern fringes of the area.

Wilderness can enhance the area's wilderness attributes since these are existing uses and facilities not usually associated with wilderness designation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without 4x4 vehicle, snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 1616 to 17,325 acres of land tentatively suitable for timber production would not be available under this prescription depending upon the alternative chosen. This would remove about 6.6 to 86.7 MMBF in standing volume from the Forest timber base depending upon the alternative chosen. The standing volume is generally scattered.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 10,828 AUM's, could continue on the portions of the 13 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. There is no known elk winter range in the Italian Peaks Area (I1-945).

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of timber, minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes mineral development, the related industries would not be supported by this emphasis. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access. Hunting activities in the Italian Peaks area would not be altered since motor vehicles are not permitted in the area.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 30 mining claims will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 66,652 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention)

Portions of the Maiden Peak/Eighteenmile Peak/Italian Peak Roadless Area (1-945, A and I1-945) are assigned these prescriptions in Alternatives A, B, F, G, H and W. Under Alternative F approximately 12 percent of the area is assigned to timber management. As little as 2 percent is assigned in Alternative A.

Timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

The attendant roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.
>
> The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.
>
> The scattered patches of timber in the Italian Peaks/Eighteen Mile/and Maiden Peak areas are important for Elk secrurity. The degree of security cover losses will relate to the magnitude of the timber harvest in the area.
>
> Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.
>
> These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of minerals, wildlife, recreation, grazing, and wilderness. Mineral resources would be available, thus supporting minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Assignment of prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Assignment of prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Assignment of NRT CORR prescription would severely restrict access for mineral and energy resources.

3. Designation: Nonwilderness
   Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Maiden Peak/Eighteenmile Peak/Italian Peak Roadless Area (1-945, A and I1-945) are assigned to these emphases in Altenatives B, F, G, H, W and S; from less than 1 percent in Alternative F to 29 percent in Alternative B.

Under these prescriptions, motorized use will likely increase slightly for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase slightly. The number of roads, both improved, constructed roads and could be expected to increase.

There are currently extensive range developments in area 1-945 Madien Peak area and A1-945 Eighteen Mile Peak. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Primitive and semi-primitive recreation opportunities may be adversely affected; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.
>
> Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites mainly in the Maiden Peak area (1-945), the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce some of the cost of management. Accessibility for other kinds of other resource management would generally be unaffected.

Assignment of prescription 15-24 would not restrict access for mineral and energy resources. Assignment of prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

Portions of the Maiden Peak/Eighteenmile Peak/Italian Peak Roadless Area (1-945, A and I1-945) are assigned these emphases in Alternatives A, B, F, G, H, W and S; from 35 percent in Alternative G to 84 percent in Alternative A. The Morrison Lake Recreation Areas is included in this grouping in Alternative S (the Proposed Action.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.

The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. The tentatively suitable timber land in area (1-945), which is unavailable could slightly affect the jobs and income in the wood products industry; however, access through lands managed under these emphases would be allowed. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Assignment of prescription 1-1 would not restrict access for mineral and energy resources. Assignment of prescription 8-9 would moderately restrict access for mineral and energy resources. Assignment of prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources.

5. Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Small portions of the Maiden Peak/Eighteenmile Peak/Italian Peak Roadless Area (1-945, A and I1-945) are assigned these prescriptions in Alternatives B, F, G, H, W and S. Alternative S, the Proposed Action, assigns the largest portion of the area to these emphases.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will probably not increase much for areas (1-945) and (A1-945), which already have extensive range developement. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase slightly.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

The scattered patches of timber in the Italian Peaks, Eighteen Mile, and Maiden Peak are important for Elk security. Elk security will be maintained in the short-term and decrease in the long-term as timbered areas age and begin to deteriorate.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites mainly in area (1-945), the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could very slightly affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Assignment of prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Assignment of prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Assignment of prescription 8-10 would totally restrict access for mineral and energy resources.

REFER TO MAPS PAGE C - 526 AND C - 527

APPENDIX C - ROADLESS AREA EVALUATION
Salmon National Forest

Roadless Area Name 13945		Gross Acres	Net Acres
13945	Italian Peak (Salmon)	50,181	50,033
4-945	Italian Peak (Targhee)	146,300	146,300
1-945	Maiden Peak (Bvhd.)	50,116	50,116
A1-945	Eighteenmile Peak (Bvhd.)	28,175	27,815
I1-945	Italian Peak (Bvhd.)	12,986	12,986
Total		287,758	287,250

I. DESCRIPTION (Salmon National Forest)

This roadless area is shared by the Salmon National Forest, the Targhee National Forest (both Region 4) and the Beaverhead National Forest (Region 1). The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The Italian Peak Roadless Area is approximately 40 air miles southeast of Salmon, Idaho, and five air miles east of Leadore. The area is bounded on the northeast by State Highway 29, and by the Forest boundary on the rest of the area. A BLM wilderness study area abuts the southern portion of the area. Access to the Italian Peak Roadless Area can be gained from the state highway and from road #130 along Cruikshank Creek, Forest road #177 along Hawley Creek, and Forest road #188 in Dry Canyon.

The area is dissected by two major drainages, Cruikshank Creek and Hawley Creek. Elevations range from 6,800 feet to over 10,700 feet at Baldy Mountain. The area forms the western slope of the Continental Divide and is the northern extension of the basin and range topography found in Utah and Nevada. Glaciation has formed rocky ridges and high peaks with broad U-shaped canyons in the headlands of the drainages. Steep canyon walls with rock outcroppings are typical of the lower elevation topography. Precipitation, mostly in the form of snow, ranges from 15 to 20 inches annually. Summer high temperatures of 80 to 90 degrees are contrasted by winter lows of 40 below zero. A mixture of limestone, quartzite, and volcanic rock forms the bedrock, producing soils with textures ranging from loamy clays to loamy sands. Much of the country is covered with sagebrush and grass. Douglas-fir occurs throughout the lower elevations, with lodgepole pine and subalpine fir occurring on the higher elevations. The ecosystems that occur in the area are western spruce-fir and sage-grass.

The Italian Peak Roadless Area is contiguous with another roadless area (#01945 Beaverhead NF) on the east; the BLM Eighteenmile Wilderness Study Area on the south and southwest; BLM administered lands on the west and north; and is separated by a road corridor from another roadless area (#13944) on the northwest. The Targhee (#15945) adjoins the area on the south.

This area contains some outstanding scenery, particularly in the high divide country.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Man's influence on the natural integrity of this unit has been low. The long-term impacts can be deleted, or have a moderate feasibility of correcting. This roadless area would be apparently natural to most visitors.

B. OPPORTUNITIES FOR SOLITUDE

The area has a moderate opportunity for solitude and primitive recreation, but opportunities for challenging experiences are rare. The area has significant size and good distance from core to perimeter, but only moderate amounts of topographic and vegetative screening with some permanent off-site intrusions, all of which result in a moderate opportunity for solitude. Due to these factors and only moderate amounts of diversity, the opportunity for primitive recreation is moderate.

C. PRIMITIVE RECREATION OPPORTUNITIES

The area has a moderate opportunity for primitive recreation, but oppportunities for challenging experiences or encountering serious hazards are rare.

D. OTHER FEATURES

There are no remarkable geographical or topographical features in this roadless area and the value of its cultural ones has not been determined.

E. MANAGEABILITY AND BOUNDARIES

Logical and manageable boundaries could be developed for this unit, with boundary changes to delete existing intrusions. Size is not a factor with this unit. Overall, this unit meets the attributes necessary for consideration as wilderness. The long-term impacts that exist can be deleted by boundary modification, or have a moderate feasibility of correcting.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-945 VALUE	A1-945 VALUE	I1-945 VALUE	4-495 VALUE(Targ.)	1-3945 VALUE(Salm.)	COMBINED VALUE
Acres							
Gross	Acres	50,116	28,175	12,986	146,300	50,181	287,758
Net	Acres	50,116	27,815	12,986	146,300	50,033	287,250
Recreation							
Primitive	RVD's	634	110	163	*	0	907
SPNM	RVD's	923	154	237	*	0	1314
SPM	RVD's	913	163	235	*	5700	7011
Roaded Natural	RVD's	*	*	*	*	3700	3700
Range							
Existing obligated suitable	Acres	20,494	24,448	4762	124,200	17,851	191,755
Allotments	# of	7	6	2	19	4	36**
AUM's	AUM's	6508	3866	454	10,300	7112	28,240
Exist. Vacant Suit.	Acres	0	0	0	*	0	0
Allotments	# of	0	0	0	*	0	0
Prop. Suit. Vacant	Acres	*	*	*	*	18,100	18,100
AUM's	AUM's	*	*	*	*	7500	7500
Timber							
Tentative suitable	Acres	13,591	2118	1616	*	7951	25,276
Standing Volume	MBF	71,258	8789	6622	*	59,000	145,669
Corridors							
Existing/Potential	# of	0	1	0	0	1	2
Wildlife T&E							
Bald Eagle	Acres	0	0	0	*	0	0
Gray Wolf	Acres	*	*	*	*	0	0
Big Game							
Winter Habitat	Acres	11,763	2518	5113	42,300***	5120	66,814
Summer Habitat	Acres	*	*	*	***	50,033	50,033
Elk							
Winter Habitat	Acres	2044	787	0	*	5120	7951
Summer Habitat	Acres	*	*	*	*	50,033	50,033
Deer							
Winter Habitat	Acres	30	0	0	*	2560	2590
Summer Habitat	Acres	*	*	*	*	50,033	50,033
Significant Fisheries							
Stream Miles	Miles	17.1	29.4	15.3	38	6.1	105.9
Stream Habitat	Acres	4.6	16.1	11.2	*	5.4	37.3
Lakes	# of	9	6	0	*	1	16
Lake Habitat	Acres	40	12	0	20	10	82
Water Developments							
Existing	# of	0	0	0	0	47	47
Minerals							
Very High	Acres	0	0	0	146,300	0	146,300
High	Acres	7526	0	0	0	50,033	57,559
Moderate	Acres	42,590	27,815	12,986	0	0	83,391
Low	Acres	0	0	0	0	0	0
Claims	# of	30	0	0	1	190	221
Oil and Gas Potential							
Very High	Acres	0	0	0	0	0	0
High	Acres	50,116	27,815	12,986	0	0	90,917
Moderate	Acres	0	0	0	103,800	0	103,800
Low	Acres	0	0	0	42,500	50,033****	92,533
Oil and Gas Leases							
Leased area	Acres	49.534	16,116	1002	14,300	2150	83,102
Leases	# of	*	*	*	*	1	1

* Not Available

** Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of area.

*** Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk Habitat.

**** Rating also includes uranium, geothermal and other energy resources.

1. Recreation

Recreation use of this unit is expected to increase as implementation of the Continental Divide National Scenic Trail proceeds. Certain types of recreational use would decrease should motorized use be prohibited. Recreation use, estimated at 9,400 RVD's in 1982 includes hunting, fishing, backpacking, horsepacking, trail bike riding, snowmobiling, and ORV use.

2. Wildlife

Inherent vegetative diversity and a wide range of elevation make this area important to many wildlife species. Elk calving and mule deer fawning areas are located in the upper portion of the Cruikshank and Hawley Creek drainages, as are important riparian areas for small birds and mammals. This area contains both key big game winter and summer range. Moose are occasionally observed. Natural cover/forage ratios in this area are near to below optimum.

The area contains two streams with significant resident fisheries, but habitat conditions have been influenced by past livestock management. Several other streams support populations of resident rainbow, cutthroat, and rainbow cutthroat hybrid trout. One lake provides excellent trout habitat. Fishing use of the streams ranges from light to heavy. The majority of use is within the Hawley Creek drainage. General fishing quality would be rated as good to excellent.

3. Water

The area is located in the headwaters of the Lemhi River and includes portions of the Canyon Creek drainage, Hawley creek drainage and several small intermittent streams which contribute directly to the Lemhi River. Generally, water yield is low to moderate and is used extensively for irrigation. A few small, localized areas have been identified in which watershed stability has been reduced, due in part to previous land management activities. Small watershed stability projects, such as gully plugs, have been inititated to restore these areas.

4. Livestock Operations

There are three cattle and horse allotments, and one sheep and goat allotment within the roadless area. Grizzly Hill, Hawley Creek and Powderhorn cattle allotments account for nearly 7,000 AUM's of permitted use annually. The Chamberlain Sheep Allotment is grazed by 1,200 sheep and contributes approximately 360 AUM's of permitted use. Most of the suitable range is in either good or fair condition, with small amounts of poor and excellent condition range present. There are 47 water developments and 61.1 miles of fence within the roadless area.

5. Ecology

The area does not contain any ecosystems identified from the RARE II analysis to be in need of representation in the wilderness system.

6. Timber

Approximately 16 percent of the area is potentially suitable timberland. An estimated 59 million board feet of sawtimber growing stock volume within the area have an estimated annual potential yield of .6 million board feet. A 1.717 million board feet timber sale was sold in this unit in 1982. No other sales are planned within the unit at this time. The volume is composed primarily of Douglas-fir with some lodgepole pine also occurring.

7. Minerals/Oil and Gas
The hardrock mineral potential of this area was rated high in the RARE II evaluation, and no new data modifies the original rating. There has been no mineral production from this area; however, mining claim owners continue to do assessment work. Gold, copper, and thorium occurrences are present and there are substantial potential phosphate resources within this area. Phosphate prospecting permit applications have been filed with the BLM. Oil and gas potential for the area is considered low. There are 7 pending oil and gas lease applications and one oil and gas lease within the area. There is no known potential for other currently leasable minerals.

8. Cultural Resources
Prehistoric and historic cultural resources are known to exist in this roadless area, but their significance has not been determined.

9. Land Use Authorizations
This area includes five special use permits for access roads totaling about 10.4 miles. Also included are 21.4 miles of system trails (1-1/2 miles within the intrusion), and 13.7 miles of nonsystem trails. The Continental Divide Trail runs along the east perimeter for 10.8 miles. This area has previously been used, but is not now used, for outfitter and guide purposes.

10. Non-Federal Lands
The area contain one tract of private land (HES #659) totaling 148.2 acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Fire occurrence is light.

2. Insect and Disease
Although western spruce budworm has not caused severe defoliation, the insect does reduce Douglas-fir cone crops and kill some of the understory Douglas-fir. The Douglas-fir beetle periodically kills small groups of the older, larger Douglas-fir.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The Italian Peak Roadless Area is approximately 90 road miles from the River of Return Wilderness. Use of this wilderness ranges from low to high, depending on the particular area.

It is approximately 40 miles from Salmon, Idaho; 100 miles from Idaho Falls, Idaho; and 170 miles from Missoula, Montana.

2. Contribution to Wilderness Preservation System

It has not been determined if the area represents any unique ecosystems.

3. Public Interest

During RARE I this area was inventoried as the Beaverhead IV Roadless Area #296. The decision in the RARE I FEIS to manage this area for nonwilderness resource development. Public opinion received on the area during RARE I, wilderness/nonwilderness, was against further study for wilderness. The area was not considered highly controversial during RARE I.

During the RARE II inventory and evaluation process, the Beaverhead IV Roadless Area #296 was combined with adjacent roadless areas on the Targhee NF and the Beaverhead NF. This combined area was divided into three parts. The south part (S4-945) on the Targhee NF was proposed for nonwilderness. The middle part (M4-495) on the Targhee NF and a portion of the north area (B1-001) on the Beaverhead NF were recommended for wilderness, which was later changed to futher planning in the final Carter Administration proposal to Congress. The north part (N4-495) on the Salmon NF and the remaining north part (A1-001) on the Beaverhead NF were recommended for nonwilderness. Public opinion on M4-945 and B1-001 was divided and the core area was considered highly controversial.

The decision in the RARE II FEIS was to manage the lands (N4-945) on the Salmon NF for nonwilderness resource development. Public opinion was for nonwilderness resource development for the Salmon portion area. The wilderness/nonwilderness issue was not highly controversial on the Salmon area.

Senator McClure held "Idaho Forest Management Act" hearings in Coeur d'Alene, Lewiston, Boise, and Idaho Falls during August 1983. Prior to these meetings the Senator sent out a constituent letter with four proposals; i.e., the Forest Service RARE II, Forest Industries, other commodity used groups, and the 1979 Idaho Wildlife Federation Proposal. Following the hearings, Senator McClure has received additional input from environmental groups and the Governor of Idaho. The environmental groups and Governor Evans have not included these areas in their proposals. The Idaho Fish and Game Commission provided input to Governor Evans for both wilderness and roadless management areas over the state. They did not include this area in their proposal.

During the Forest Planning review of inventoried roadless lands, public opinion was again divided ranging from no wilderness to all wilderness. The Idaho Wildlife Federation (IWF) and Idaho Outfitters and Guides Association (IOGA) recommended a "Reserved" status for the area which is basically development only if it can be done without impairing environmental values. The Idaho Environmental Council supported the IWF and IOGA recommendations. Earth First! recommended wilderness. The Idaho Mining Association, Idaho Cattlemen's Association, Outdoors Unlimited, Idaho Farm Bureau, Idaho Wool Growers, Idaho Trail Machine Association, Idaho Forest Industries Council, and Idaho Women in Timber all recommended no wilderness for Italian Peak. No recommendations were received from Governor Evans, the Idaho Wildlands Defense Coalition or the Idaho Fish and Game Commission. The wilderness/nonwilderness issue on Italian Peak generated a relatively low level of controversy during Forest Plan review of roadless areas.

Senator McClure has introduced the Idaho Forest Management Act in the Senate. The Italian Peak Roadless Area was not included in this proposed wilderness legislation.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Prescription Assignment by Alternative for the Salmon portion of the Italian Peak Roadless Area.

Alternatives	Wilderness	Non-Wilderness Roaded	Unroaded
1	0	50,181	0
2	0	50,181	0
3	0	0	50,181
4	0	50,181	0
5	0	50,181	0
6	0	50,181	0
7	0	0	50,181
8	20,673	0	29,508
9	50,181	0	0
10	50,181	0	0
11	50,181	0	0
12	0	50,181	0

(There will be a detailed discussion of these alternatives in the Salmon National Forest Draft EIS when this document is published.)

B. Impacts

The following information is specific to the Salmon Nation Forest portion of this roadless area. The detailed discussion of the Beaverhead and Targhee National Forest portions of this roadless area precede and follow the Salmon discussion in this document.

1. Designation: Wilderness
Management Prescription: Wilderness

A wilderness management prescription was considered on 20,673 acres in Alternative 8 and on 50,181 acres (all of the area) in Alternatives 9, 10, and 11.

Wilderness designation would enhance the recreation opportunities of those visitors seeking a non-motorized wilderness type experience. It would curtail; however, the opportunities of those visitors who desire to use motorized means, four-wheel drive, trail bikes, and snowmobiles to access the area. A high percentage of the current use in this area is related to the use of motorized vehicles.

Under this prescription, recreation use would continue to be dominated by big game hunting.

The Recreation Opportunity Spectrum classification for that portion designated wilderness would be Semi-Primitive Non-Motorized.

Visual Quality would be preserved in those portions designated wilderness.

The habitat potential for elk will be approximately 233 animals. Mule deer habitat potential will be approximately 450 animals.

Fish production would be similar in Alternatives 8, 9, 10, 11 with production levels near natural.

Currently, 7112 AUM's of livestock grazing is permitted on 17,851 acres of suitable range. For the most part, a moderate to low intensity of management currently exists on the affected areas. Essentially, the same level of intensity and number of permitted AUM's could be expected for Alternatives 8, 10, and 11. Permitted AUM's for Alternative 9 would be reduced somewhat to minimize resource conflicts between livestock grazing and wildlife.

In Alternative 8 approximately 50 percent of the suitable timberland would become not available. In Alternatives 9, 10, 11 all of the suitable timberland would be not available.

In Alternative 8, 20,673 acres of high potential mineral lands (low potential for oil and gas) would be unavailable for development, except for the possibility that some of the 6 existing mining claims prove to merit development. In Alternatives 9, 10, and 11, 50,181 acres of high potential mineral lands (low potential for oil and gas) would be unavailable for development except for the possibility that some of the 190 existing mining claims prove to merit development.

2. Designation: Non-wilderness
Management Prescription: Non-wilderness/Roaded

Non-wilderness roaded management was considered for the entire area, 50,181 acres, in Alternatives 1,2,4,5,6, and 12.

Recreation use would continue to be dominated by big game hunting.

The Recreation Opportunity Spectrum classification would be Roaded Natural where roads are actually constructed, but would remain Semi-Primitive Motorized throughout most of the area.

Visual Quality would be retained throughout most of the area with lesser amounts of partial retention.

Habitat potential for elk would drop to approximately 75 animals in all alternatives considered for roaded management. Mule deer habitat potential would remain at approximately 400 animals.

Fish habitat potential would be managed to meet MVP requirements.

Significant increases in the level of management intensity and number of permitted AUM's would occur in Alternatives 1, 2, 5, and 12. Implementing the high RPA Alternative (#5) would require significant amounts of additional forage improvement projects such as sagebrush management, poisonous plant control, and reseeding. Some additional fencing, water developments, and sagebrush management would be necessary to implement the market (#2) and proposed current (#1) management alternatives. The degree of competition between livestock grazing and big game habitat potential would be pronounced under the high RPA alternative. No change in the level of management intensity or permitted AUM's would occur under Alternative 4. Whereas under Alternative 6, the number of lpermitted AUM's would be reduced somewhat due to a planned strategy of low intensity management.

The area in its entirety would be designated for roaded timber management in Alternatives 1, 2, 4, 5, 6, and 12. In areas designated for roaded management, the possibility of wilderness designation generally would be foregone by the fifth decade.

Mineral development activities would not be affected.

3. Designation: Non-wilderness
Management Prescription: Nonwilderness/Unroaded

Nonwilderness unroaded management was considered on 50,181 acres (all of the area) in Alternatives 3 and 7, and on 29,508 acres in Alternative 8.

Recreation use would continue to be dominated by big game hunting, primarily by motorized means.

The Recreation Opportunity Spectrum classification would be Semi-Primitive Motorized, allowing for all current uses such as trail bike and snowmobile riding.

Visual Quality would be retained in those portions designated for unroaded management.
The habitat potential for elk will be lapproximately 233 animals for Alternatives 3 and 7, and 115 animals for Alternative 8. Mule deer habitat potential will be approximately 450 animals.

Fish production levels would remain at near natural conditions.

A roadless area prescription would have no effect on the level of intensity or permitted AUM's for Alternative 3, 7, and 8. Under Alternative 3, permitted AUM's would be significantly reduced to minimize conflicts between big game and livestock. Permitted AUM's would increase slightly in

Alternative 7, as a result of intensifying management on the more productive sites. No change from the existing situation would occur under Alternative 8.

Approximately 50 percent of the tentatively suitable timberland would be designated unroaded management in Alternative 8. In Alternatives 3 and 7, 100 percent of the tentatively suitable timberland would be designated unroaded management. Unroaded management would require that timber be harvested from outside the area or through aerial methods. Timber harvest would not occur during the first five decades. Since no roading would occur in conjunction with unroaded timber management, the harvest by itself would not have long term effects on wilderness attributes.

Mineral development activities would not be effected.

APPENDIX C - ROADLESS AREA EVALUATION
Targhee National Forest

Roadless Area Name: 1-945	Gross Acres	Net Acres
1-945 Maiden Pk. (Bvhd.)	50,116	50,116
A1-945 Eighteenmile Pk. (Bvhd.)	28,175	27,815
I1-945 Italian Pk. (Bvhd.)	12,986	12,986
15945 Italian Pk. (Targhee)	146,300	146,300
13945 Italian Pk. (Salmon)	50,181	50,033
Total	287,758	287,250

I. DESCRIPTION (Targhee National Forest portion)

The Italian Peak Roadless Area is shared by the Targhee and Salmon National Forests in Region 4 and the Beaverhead National Forest in Region 1. The Continental Divide, marking the Montana-Idaho border, splits the area into distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

This area is located directly east of State Highway 28 between Blue Dome and Gilmore Summit in Clark and Lemhi Counties, Idaho, Targhee National Forest, Region 4. It is about 25 air miles northwest of Dubois, Idaho. The northern boundary is the Continental Divide between Idaho and Montana.

Primitive roads extend into the area in the Bluebird Mountain area from Chandlier Canyon on the east and Pierce Canyon on the west. Some of the minor drainages contain primitive jeep roads that penetrate the area for short distances. Designated trails are not numerous. The majority provide access to the Continental Divide from Divide Creek, Webber Creek, Station Canyon, and Willow Creek.

The area is within the Rocky Mountain Forest Province. It is a part of the Bitterroot Range. Elevation ranges from about 6,200 to 11,400 feet. Relief varies from relatively gentle slopes in the south to rugged steep mountains in the north.

Vegetation varies depending on elevation and aspect. Lower elevations are dominated by grass-sagebrush and mountain brush. Douglas-fir and spruce occupy middle elevations upward to where subalpine fir and limber pine are found near timberline. Small patches of aspen are found on the deep-soiled sites.

The area is surrounded by land administered by the BLM on the east, west and south and by roadless area Italian Peak on the Beaverhead National Forest to the north. It is contiguous to BLM roadless area 43-3 eighteen miles on the northwestern boundary. There are few places where the area is adjacent to private and State of Idaho Lands.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Influence on natural integrity by physical developments are low; influence on apparent naturalness is very low. The integrity of the area has been little affected by developments such as roads. Developments have had very little affect on naturalness. Wilderness values are enhanced by the areas large size and by the presence of roadless areas on the Beaverhead which are contiguous to a roadless area on the Salmon National Forest and the BLM roadless area.

Appearance: Visual quality objective as inventoried and as proposed for management are shown in the following table:

Visual Quality Objective	Inventory Acres	Target Acres
Preservation	0	0
Retention	13,880	13,770
Partial Retention	58,850	132,530
Modification	61,470	0
Max. Modification	12,100	0

B. OPPORTUNITIES FOR SOLITUDE

Opportunity for solitude is high. Topographic and vegetative screening and the size of the area contribute to the opportunity for solitude.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunity for primitive recreation is high. Topography, vegetation and rock formations enhance the opportunity for primitive recreation. The area will likely be part of the Continental Divide Trail along the divide east of Eighteen Mile Peak and south of Medicine Lodge Pass.

D. OTHER FEATURES

There are no special scenic landmarks.

E. MANAGEABILITY AND BOUNDARIES

Boundaries are not well defined at the lower elevations and some boundary modification would improve manageability. Wilderness management would be compatible with management of adjacent lands.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-945 VALUE	A1-945 VALUE	I1-945 VALUE	4-495 VALUE(Targ.)	1-3945 VALUE(Salm.)	COMBINED VALUE
Acres							
Gross	Acres	50,116	28,175	12,986	146,300	50,181	287,758
Net	Acres	50,116	27,815	12,986	146,300	50,033	287,250
Recreation							
Primitive	RVD's	634	110	163	*	0	907
SPNM	RVD's	923	154	237	*	0	1314
SPM	RVD's	913	163	235	*	5700	7011
Roaded Natural	RVD's	*	*	*	*	3700	3700
Range							
Existing obligated suitable	Acres	20,494	24,448	4762	124,200	17,851	191,755
Allotments	# of	7	6	2	19	4	36**
AUM's	AUM's	6508	3866	454	10,300	7112	28,240
Exist. Vacant Suit.	Acres	0	0	0	*	0	0
Allotments	# of	0	0	0	*	0	0
Prop. Suit. Vacant	Acres	*	*	*	*	18,100	18,100
AUM's	AUM's	*	*	*	*	7500	7500
Timber							
Tentative suitable	Acres	13,591	2118	1616	*	7951	25,276
Standing Volume	MBF	71,258	8789	6622	*	59,000	145,669
Corridors							
Existing/Potential	# of	0	1	0	0	1	2
Wildlife T&E							
Bald Eagle	Acres	0	0	0	*	0	0
Gray Wolf	Acres	*	*	*	*	0	0
Big Game							
Winter Habitat	Acres	11,763	2518	5113	42,300***	5120	66,814
Summer Habitat	Acres	*	*	*	***	50,033	50,033
Elk							
Winter Habitat	Acres	2044	787	0	*	5120	7951
Summer Habitat	Acres	*	*	*	*	50,033	50,033
Deer							
Winter Habitat	Acres	30	0	0	*	2560	2590
Summer Habitat	Acres	*	*	*	*	50,033	50,033
Significant Fisheries							
Stream Miles	Miles	17.1	29.4	15.3	38	6.1	105.9
Stream Habitat	Acres	4.6	16.1	11.2	*	5.4	37.3
Lakes	# of	9	6	0	*	1	16
Lake Habitat	Acres	40	12	0	20	10	82
Water Developments							
Existing	# of	0	0	0	0	47	47
Minerals							
Very High	Acres	0	0	0	146,300	0	146,300
High	Acres	7526	0	0	0	50,033	57,559
Moderate	Acres	42,590	27,815	12,986	0	0	83,391
Low	Acres	0	0	0	0	0	0
Claims	# of	30	0	0	1	190	221
Oil and Gas Potential							
Very High	Acres	0	0	0	0	0	0
High	Acres	50,116	27,815	12,986	0	0	90,917
Moderate	Acres	0	0	0	103,800	0	103,800
Low	Acres	0	0	0	42,500	50,033****	92,533
Oil and Gas Leases							
Leased area	Acres	49,534	16,116	1002	14,300	2150	83,102
Leases	# of	*	*	*	*	1	1

* Not Available

** Portions of allotments may be contained in several roadless areas. The combined value displays total allotments occurring across a group of area.

*** Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk Habitat.

**** Rating also includes uranium, geothermal and other energy resources.

1. Recreation

The area has good potential for many forms of dispersed recreation such as hiking, backpacking and off-road vehicle use but recreation use is light with most activity being confined to fishing, hunting, and horseback riding, especially in the Weber Canyon and Divide Creek Lake areas. Climbing is enjoyed on Scott, Weber and Italian Peaks. The area will likely be part of the Continental Divide Trail along the divide east of Eighteen Mile Peak and south of Medicine Lodge Pass.

Recreation opportunity spectrum (ROS) as inventoried and as proposed for management are shown in the following table:

Recreation Opportunity Spectrum	Inventory Acres	Planned Acres
ROS I Primitive	42,500	42,500
ROS II Semiprimitive Nonmotorized	10,200	0
ROS III Semiprimitive Motorized	89,600	99,300
ROS IV Roaded Natural Appearing	4,000	4,500
ROS V Rural	0	0

2. Wildlife

The area supports a variety of wildlife, including antelope, deer, elk, mountain lion and moose. Lower elevations are important deer, elk and moose winter range. Bighorn sheep were recently reintroduced into the area. A high mountain lake fishery exists in Divide Creek Lake; all streams in the unit contain wild, fishable populations of trout. Rocky Mountain wolf, an endangered species, have been sighted in the area.

3. Water

The unit does not have an abundance of water, especially at lower elevations. Several strams do head in the unit which are important for fish, wildlife, and livestock as well as downstream grazing.

4. Livestock Operations

The area includes all or parts of 12 cattle allotments and seven sheep allotments. Much of the area, especially the open grass-sagebrush areas, are very productive and provide excellent grazing. Currently the area produces about 10,300 AUM's of grazing. There is a potential to increase use by about 450 AUM's. Permittees have about $73,000 invested in range improvements.

5. Ecology

Ecological diversity is high due to contrasting aspects and a wide range in elevation. The entire area is within the Douglas-fir Forest and the Western Spruce-fir Forest ecosystems.

6. Timber

Timber is generally classified as overmature, slow growing, and of low quality. There are, however, volumes of Douglas-fir which could be harvested. There is a potential to harvest about 3.2 MMBF of timber per year. No timber has been harvested in the area.

7. Minerals/Oil and Gas

There are known deposits of lead and nickel. There is an active mining claim in Willow Creek. The area lies within the overthrust belt and has structures similar to the producing overthrust oil and gas fields in southwestern Wyoming and northeastern Utah. However, no discoveries have been made to date. Under a wilderness designation, existing mineral leases will still be valid; development would likely be more difficult. New leases would not be granted after January 1, 1984.

At one time mineral activity on the unit was fairly active. Lead, silver, nickel, and gold were all taken from the unit. There is no mining of consequence at present; however, much of the area is under lease for oil and gas. Uranium potential of the area is also under investigation.

8. Cultural Resources

Except for remnants of historic mining activity, significant cultural resources are not known to exist.

9. Land Use Authorizations

There are no special uses that are noncompatible with wilderness designation.

10. Non-Federal Lands

There are no private acres within this roadless area.

B. MANAGEMENT CONSIDERATIONS

1. Fire

Much of the area is covered by the High Country Fire Management Plan which allows some wildfires to burn under prescription. Recommendations regarding future management will require coordination with the Salmon and Beaverhead National Forests and BLM as all manage roadless areas that are contiguous. Private lands and public lands will need to be considered in the future management of the area.

2. Insects and Disease

IV. NEED

1. Proximity to Other Designated Wilderness and Population Centers

This area is approximately 82 air miles southeast of the Frank Church River of No Return Wilderness, the nearest classified wilderness area. It is approximately 52 air miles northwest of Idaho Falls, Idaho.

2. Contribution to the Wilderness Preservation System

There is no need for ecosystem representation within the National Wilderness Preservation System.

3. Public Interest

The area was designated as a further planning area in RARE I. It was supported for wilderness designation by Idaho conservation groups during the RARE II process. A portion was designated a further planning area by the RARE II decision.

Public involvement associated with the roadless area reevaluation again indicates strong support for wilderness.

TABLE C
EFFECTS OF ALTERNATIVES ON PHYSICAL AND BIOLOGICAL ENVIRONMENT

		ALTERNATIVE							
RESOURCE ACTIVITY 1/	UNIT OF MEASURE	A	B	C	D	E	F	G	H
RECREATION									
Developed Sites	MRVD 2/								
Dispersed Sites	MRVD	10	10	11	10	11	0	11	11
WILDLIFE									
Habitat Improvement									
Acres	MAcres	.14	.14	.14	.14	.14	.14		
Structures	Structures	15	15	15	15	5	15		
LIVESTOCK GRAZING									
Cattle	MAUM 3/	5573	5602	5506	5604	5506	5724	5415	3093
Sheep	MAUM	2081	2091	2057	2093	2057	2137	2022	1155
TIMBER									
Programmed Sales Offered									
Douglas-Fir	MMBF 4/								
Lodgepole Pine	MMBF								
Fuelwood	MMBF								
Reforestation	MAcres								
Timber Stand Improvement	MAcres								
SOIL AND WATER									
Water Meeting Quality Goals	MAcre Ft 5/	65.0	65.0	64.8	64.9	64.8	65.0	64.9	64.9
Soil & Water Resource Imp.	Ac.								
MINERALS	Operating Plans	45	45	3	20	3	20	3	3
PROTECTION									
Fire Management Effectiveness	$/MAc.	137.8	137.8	137.8	137.8	137.8	137.8	137.8	137.8
Fuelbreaks & Treat.	MAc.								
ROAD CONST./RECONST. (Local)	Miles								

1/ All values are annual averages for the period 1984 through 1990.
2/ MMRVD = Thousand recreation visitor days.
3/ MAUM = Thousand animal unit months.
4/ MMBF = Million board feet.
5/ MAc. Ft. = Thousand acre feet.

TABLE A
ALTERNATIVE MANAGEMENT PRESCRIPTION FOR ROADLESS AREAS 1/
THOUSANDS OF ACRES

ROADLESS AREA
Name: Italian Peak
Number: 1[illegible]945
Acres: 146,300

MANAGEMENT PRESCRIPTION	ALTERNATIVE* A	B	C	D	E	F	G	H
RECOMMENDED FOR WILDERNESS DESIGNATION			42.5		42.5		142.3	146.3
NONWILDERNESS - MANAGED AS UNDEVELOPED								
Primitive				52.7	10.2			
Semi-Primitive Nonmotorized				89.6	89.6			
Semi-Primitive Motorized			99.3					
NONWILDERNESS - AVAILABLE FOR A FULL RANGE OF RESOURCE ACTIVITIES								
Roaded Natural Appearing	146.3	146.3	4.5	4.0	4.0	146.3	4.0	
Rural								
Developed for Timber, Wildlife & Watershed Management								

* See the Targhee National Forest Draft EIS for a more detailed discussion of these alternatives.

TABLE B
ALTERNATIVE EFFECTS ON WILDERNESS CHARACTER

	ALTERNATIVE A	B	C	D	E	F	G	H
RECOMMENDED WILDERNESS								
MAcre			2.5		42.5		142.3	146.3
Percent of Area			29		29		97	100
NONWILDERNESS								
Area Retaining Apparent Naturalness, Primitive Recreation Opportunity and Solitude (ROS I and II)								
MAcres				52.7	10.2			
Percent of Area				36	7			
Area Retaining Apparent Naturalness and Primitive Recreation Opportunity (ROS III)								
MAcres			99.3	89.6	89.6			
Percent of Area			68	61	61			
Managed for a Full Range of Resource Activities (ROS IV and V)								
MAcres	146.3	146.3	4.5	4.0	4.0	146.3	4.0	
Percent of Area	100	100	3	3	3	100	3	
Planned for Development								
MAcres								
Percent of Area								
Remaining Essentially Undeveloped								
MAcres	146.3	146.3	4.5	4.0	4.0	146.3	4.0	
Percent of Area	100	100	3	3	3	100	3	

B. IMPACTS

(The following information is specific to the Targhee National Forest portion of this roadless area. The detailed discussion of the Salmon and Beaverhead Naional Forest portion of this roadless area immediately precede the Targhee discussion in this document.)

1. Effects of Wilderness/Nonwilderness Prescriptions

Displayed in the tables on the following pages are management prescriptions, effects on wilderness characteristics and resource outputs for each alternative.

This roadless area is contiguous to a roadless area on the Beaverhead National Forest in Montana which in turn, is contiguous to a roadless area on the Salmon National Forest. In combination, these areas make up the Italian Peak roadless area.

Both the Beaverhead and Salmon National Forests will complete a roadless area reevaluation after the Targhee. The Beaverhead's draft environmental impact statement will contain an analysis and preferred alternative for the entire roadless area. The material presented in this section applies only to the portion of the roadless area on the Targhee National Forest. The preferred alternative (alternative C) is based on an analysis of the Targhee portion only and may be modified by additional analysis of the entire area.

Alternatives C, E, G and H would recommend wilderness for a portion of the area. These alternatives also specify roadless and undeveloped management for most of the remainder of the unit. Alternatives A, B and F specify that the aea be available for a full range of activities. Alternative D specifies unroaded and undeveloped management.

Unless mineral development occurs, wilderness characteristics will be little affected regardless of alternative. Alternatives A and B place the fewest restrictions on mineral exploration and development. Opportunities for solitude would be greatest in alternatives D, E, G and H because more of the area would be closed to motorized vehicles.

There would be no timber harvested in any alternative. Livestock grazing would be highest in alternatives B, D and F. Mineral development would be more likely in alternatives A and B. Capacity of wildlife habitat is highest in alternatives C, E, G and H.

2. Preferred Alternative (Alternative C)*

About 97 percent of the area (141,800 acres) will be recommended for wilderness or managed as unroaded and undeveloped. The only developmental activities planned are range improvements. These activites would not have an irreversible or irretrievable effect on wilderness character. Management direction specifies that roads, drill pads, etc. associated with mineral development be obliterated and returned to natural conditions. Most of the timber is not included in the timber base. Future harvest is unlikely.

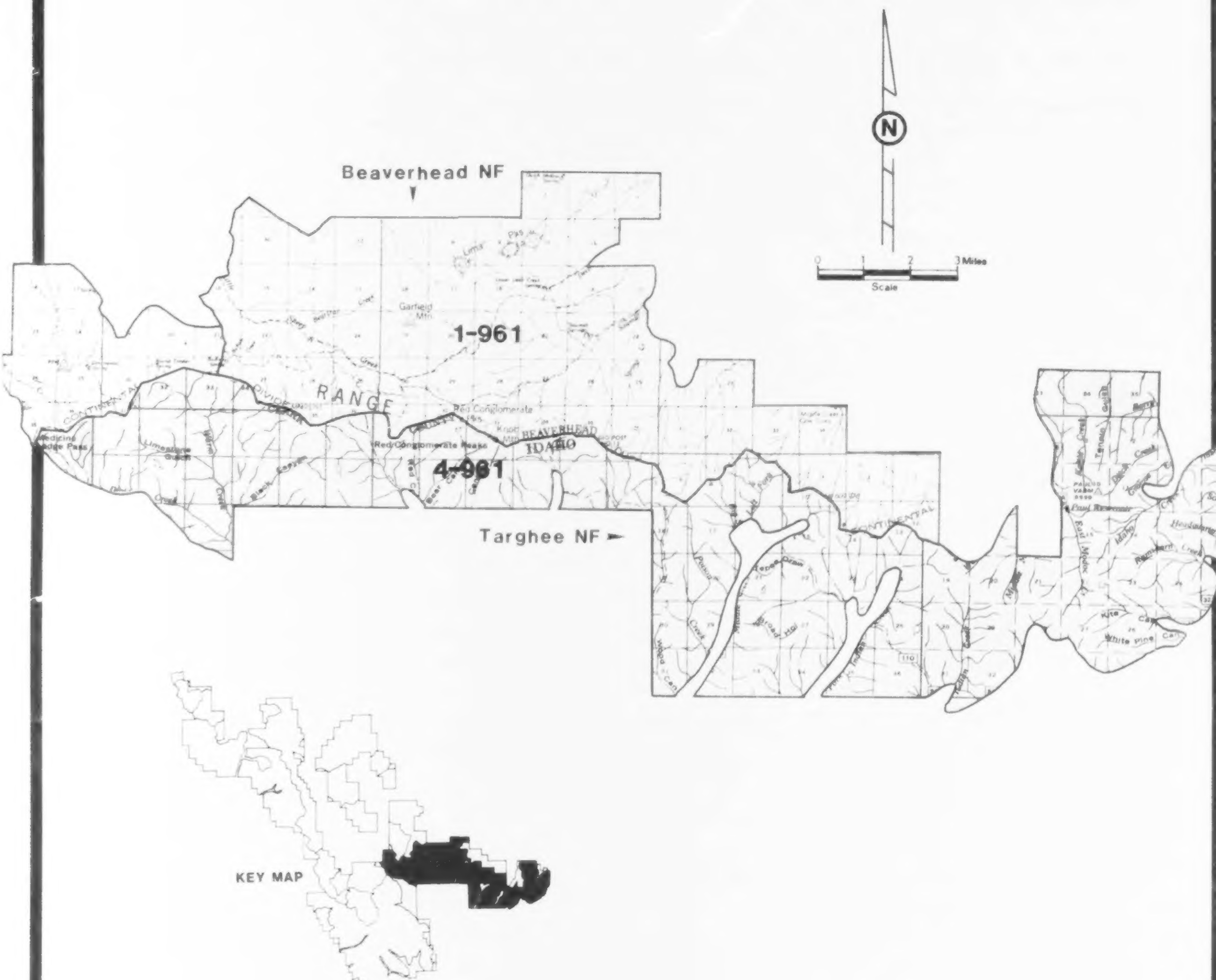
There are no social or economic values that would be significantly enhanced or foregone as a result of wilderness designation for a portion of the area.

Approximately 42,500 acres are recommended for wilderness and the remaining 103,800 acres for nonwilderness designation to the Beaverhead National Foest in the preferred alternative. The actual recommendation to be incorporated into the Targhee Forest Plan will depend on the results contained in the Final EIS for the Beaverhead Forst Plan.

*Alternative C of the Targhee National Forest is comparable to Alternative S of the Beaverhead National Forest.

ROADLESS AREA 1-961

GARFIELD MOUNTAIN


Beaverhead NF
N
0
1
2
3 Miles
Scale
1-961
4-961
Garfield Mtn
RANGE
Red Conglomerate
Red Conglomerate Peaks
BEAVERHEAD
IDAHO
CONTINENTAL
DIVIDE
Medicine Lodge Pass
Limestone
Black Canyon
Targhee NF
KEY MAP

LIMA PLANNING UNIT

Roadless Area Name: 1-961 Garfield Mountain	Gross Acres	Net Acres
Beaverhead National Forest	42,701	42,701
Targhee National Forest	47,500	47,500
Total	90,201	90,201

I. DESCRIPTION (Beaverhead National Forest)

The Garfield Mountain Roadless Area is shared by the Beaverhead National Forest in Region 1 and the Targhee National Forest in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.)

Garfield Mountain is located approximately six miles south of Lima, Montana and is accessed from dirt roads off Interstate 15 and from the County road up Big Sheep Creek. It lies north of the Continental Divide from Poison Creek to Pine Creek. It contains Sawmill Creek and the area east to Middle Creek, the White Pine Ridge and Little Sheep Creek. The Continental Divide is a sharp, grassy ridge along the southern boundary of this area. Lands near the Divide are very strongly dissected; the entire land surface is comprised of the steep sideslopes of shallow V-shaped valleys. The Lima Peaks form a steep rocky ridge across the northwest corner of the area. Glacial cirques cup the north face of these mountains, sloping to the north in small glacial valleys and moraine. The steep rocky slopes of Garfield Mountain dominate the southeast corner. A broad high rocky ridge, surrounded by steep rocky slopes, lies west of Garfield Mountain. In the eastern half of this area, the Continental Divide is a gently sloping ridge. The highest point is Garfield Mountain at 10,395 feet. The Lima Peaks and Red Conglomerate Peak furnish a scenic background for the surrounding valleys of rolling grass and sagebrush-covered slopes.

Vegetation on most of the area is grassland, with small patches of forest on the north-facing slopes at mid and high elevations. Predominant tree species are Douglas-fir and lodgepole pine and some subalpine fir and Engelmann spruce.

Soils at lower elevations are predominantly clay loams and clays, with shallow gravelly loams along low ridges. Along the Continental Divide, soils are very shallow sandy loams, very susceptible to erosion.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

This roadless area is mountainous with wide expanses of rolling foothills, and offers panoramic views of adjacent valleys. The Garfield Mountain area is relatively natural in appearance; however, range developments and low standard roads have some impacts on the natural appearance and the natural integrity of the area. The relatively large size of the area is complimented by the adjacent, sparsely populated, rural community and by the adjacent National Forest and BLM lands.

B. OPPORTUNITIES FOR SOLITUDE

The general lack of diversity in the area influences its potential for opporunities for solitude and primitive recreation. There is some topographic screening, but the lack of vegetative screening allows parts of the area to be visible from Interstate 15. Much of the region is presently in a road closure area that limits recreationists to walking or horseback, except in designated areas.

C. PRIMITIVE RECREATION OPPORTUNITIES

Primitive recreation opportunities are limited by the lack of diversity in the area. There are opportunities for hiking, camping, and backpacking in the mountainous regions.

D. OTHER FEATURES

Indian pictographs are of special interest, and there is a travertine mine in the Medicine Lodge Pass area.

E. MANAGEABILITY AND BOUNDARIES

The Garfield Mountain Roadless Area on the Beaverhead National Forest is of sufficient size to be managed as a wilderness area, and the possibility exists that it could be combined with the adjacent roadless area on the Targhee National Forest to form an even larger and more complete wilderness area. The Beaverhead portion of Garfield Mountain is bordered by private and BLM ground on the north and would require extensive posting. Little mitigation could be accomplished by boundary changes.

Beaverhead 1977 Inventory Acres	37,000 gross	36,990 net
Beaverhead 1983 Inventory Acres	42,701	42,701
Change	+ 5701	+ 5711
Reasons for inventory acre change:		
Mineral activity and roads	- 1539	- 1539
Acreage Recalculation	+ 7240	+ 7250

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-961 Bvhd VALUE	1-961 Targhee VALUE	COMBINED VALUE
Acres				
Gross	Acres	42,701	47,500	90,201
Net	Acres	42,701	47,500	90,201
Recreation				
Primitive	RVD's	540	*	540
SPNM	RVD's	787	*	787
SPM	RVD's	779	*	779
Range				
Existing obligated suitable	Acres	39,667	38,000	77,667
Allotments	# of	6	9	15

Resource Potentials, continued

AUM's	AUM's	7860	3900	11,760
Exist. Vacant Suit.	Acres	0	*	0
Allotments	# of	0	*	0
Timber				
Tentative suitable	Acres	10,206	*	10,206
Standing Volume	MBF	55,312	*	55,312
Corridors				
Existing/Potential	# of	1	0	1
Wildlife T&E				
Bald Eagle	Acres	0	*	0
Big Game				
Winter Habitat	Acres	0	8600**	8600
Elk				
Winter Habitat	Acres	0	**	0
Deer				
Winter Habitat	Acres	0	**	0
Significant Fisheries				
Stream Miles	Miles	25.1	38.0	63.1
Stream Habitat	Acres	12.9	*	12.9
Lakes	# of	0	0	0
Lake Habitat	Acres	0	0	0
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	1500***	47,500	49,000
High	Acres	8555	0	8555
Moderate	Acres	32,676	0	32,676
Low	Acres	0	0	0
Claims	# of	3	*	3
Oil and Gas Potential				
Very High	Acres	42,731	0	42,731
High	Acres	0	0	0
Moderate	Acres	0	47,500	47,500
Low	Acres	0	0	0
Oil and Gas Leases				
Leased area	Acres	42,731	47,500	90,231

*Not available

**Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk habitat.

***VH for decorative stone; same acres are M for locatable minerals.

1. Recreation
   Recreation opportunities are available for big game hunting, fishing, hiking, and sightseeing.

2. Wildlife
   This area supports populations of grouse, deer, and elk. The headwaters of Sawmill Creek is an elk calving area. There is an important big game summer range in the southern part of the area along the Continental Divide.

3. Water
   The capacity of this area to store water is moderate. Spring runoff and rains often produce heavy sediment loads. Water turbidity is high, particularly at Little Sheep Creek.

4. Livestock Operations
   Most of the Garfield Mountain area is grazed by cattle except for some of the steeper or timbered lands. Most of the lower range is primary range with large amounts of secondary range on the steeper slopes. Grazing occurs from July through mid to late October.

5. Ecology
   The area is predominantly representative of grass and grass/sagebrush steppes with seral lodgepole stands occurring at the higher elevations.

6. Timber
   The Garfield Mountain Roadless Area has 10,206 acres of suitable timberland with a standing volume of approximately 55.3 MMBF (19.2 MMCF). The timber is scattered, mainly occurring in small isolated pockets.

7. Mineral/Oil and Gas
   Geologic favorability for locatable minerals is moderate (80%) to high (20%). Mining activity has been limited. A metallurgical grade silica deposit is located adjacent to the northwest boundary of the area. Currently it is being developed by detailed drilling. A travertine deposit is located within the southwestern part of the area, consequently 1,500 acres are rated very high for decorative stone.

   Geologic favorability for oil and gas is very high. Part of the Lima Anticline is located within the area. Two exploratory wells have been drilled north of the area, and at least two others have been drilled near Monida Pass. The entire area has been leased for oil and gas. Extensive geophysical exploration has occurred and will continue.

8. Cultural Resources
   The Middle Fork of Little Sheep Creek contains Indian pictographs.

9. Land Use Authorizations
   There are no special land uses authorized for this area.

10. Non-Federal Lands
    There are no private acres.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire

Fire has occurred infrequently, especially in the eastern regions of this area as there are no heavy concentrations of timber.

2. Insects and Disease

Insect infestation and disease are considered minimal in this area due to low amounts of timber.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers

The closest wilderness area is the Anaconda-Pintler located approximately 100 miles north; it receives moderate use. Garfield Mountain is quite a distance from centers with populations greater than 30,000.

2. Contribution to Wilderness Preservation System

This area would contribute to the National Wilderness preservation System by providing examples of low and mid-elevation grass and grass-sagebrush steppes, complex vegetative diversity, interesting geological features, and diverse topographic relief.

3. Public Interest

The Garfield Mountain Roadless Area was inventoried in RARE I only as an essentially roadless area, and the decision in that process was to manage the area for nonwilderness uses. In 1977 the area was inventoried as roadless in the RARE II process. The wilderness potential of the area was evaluated in the land managment planning process that was occurring concurrently with RARE II. There was little public desire for wilderness classification of the area expressed in response to the review of the 1977 Beaverhead Forest DEIS (Draft Impact Environmental Statement) and Forest Plan. Based on a nonwilderness decision made in the Beaverhead 1978 Final EIS, the area was dropped from further study in RARE II.

In 1983 the area was again inventoried as roadless in the Forest Planning process. Response to the "1983 Roadless Area Evaluation" brochure issued by the Forest again indicated little public support for a wilderness designation in Area 1-961. Instead, the publics who directed response specifically to this area were in favor of nonwilderness management, because the area was not large enough, had no special wilderness qualities, and was roaded.

The Wilderness Society and those commentors who supported their position proposed "more sensitive" management for the Garfield Mountain Roadless Area. Primarily they were interested in retaining primitive recreation, wildlife, and visual values by limiting new road construction to that amount "absolutely essential for the enjoyment of an existing mineral lease." Their key objective is to "maintain existing wilderness suitability...while continuing existing low inensity uses within a roadless management framework." There was little interest in wilderness designation for this area expressed by commentors.

V. ALTERNATIVES AND EVVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Garfield Mountain Roadless Area (1-961)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S
Targhee National Forest										
Wilderness:	0	0	0	0	0	0	0	47,500	0	
Nonwilderness:	47,500	47,500	47,500	47,500	47,500	47,500	47,500	0	47,500	
Beaverhead National Forest										
Group 1: 1/	0	0	42,701	42,701	42,701	0	0	42,701	0	
Group 2: 2/	1810	2139	0	0	0	2139	0	0	1260	
Group 3: 3/	0	8555	0	0	0	10,664	5133	0	8525	161
Group 4: 4/	40,891	28,233	0	0	0	19,250	19,250	0	26,118	28,25
Group 5: 5/	0	3774	0	0	0	10,648	18,318	0	6798	12,83
BEAVERHEAD TOTAL:	42,701	42,701	42,701	42,701	42,701	42,701	42,701	42,701	42,701	42,70
TARGHEE TOTAL:	47,500	47,500	47,500	47,500	47,500	47,500	47,500	47,500	47,500	
ROADLESS AREA TOTAL:	90,201	90,201	90,201	90,201	90,201	90,201	90,201	90,201	90,201	90,20

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* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.
** Land designations for Alternatives S and SA are the same; therefore only S is displayed.
1/ Group 1 is Wilderness emphasis.
2/ Group 2 is Timber emphasis.
3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.
4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.
5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis, Beaverhead Portion*

Management Emphasis	Alternative (Net Acres) A CD**	B	C	D	F	G	H	I	W	S PA***
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	
Decade 5****	2130	2179	0	0	0	2239	0	0	1800	
Roadless:										
Decade 1	42,701	42,701	0	0	0	42,701	42,701	0	42,701	42,70
Decade 5****	40,571	40,522	0	0	0	40,462	42,701	0	40,901	42,70
Wilderness:	0	0	42,701	42,701	42,701	0	0	42,701	0	

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* For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Targhee National Forest portion of Area 1-961, refer to th Targhee Impact discussion beginning on page C-581 of this document.
** CD is the Current Direction Alternative.
*** PA is the Proposed Action Alternative.
**** The "decade 5" projection represents what would occur in 50 years if implementation of the managem designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

The following information is specific to the Beaverhead National Forest portion of this roadless area. The detailed discussion of the Targhee National Forest portion of this roadless area immediately follows the Beaverhead discussion in this document.

1. Designation: Wilderness
   Management Emphasis: Wilderness

The Garfield Mountain Roadless Area 1-961 is designated wilderness in Alternatives I, C, D and F.

Wilderness can enhance the area's wilderness attributes since these are existing uses and facilities not usually associated with wilderness allocation. The existing roads in and motorized use of the area, other than that associated with maintenance of historically-established range use, could be eliminated. Currently the area west of Garfield Mt. is closed to motorized vehicles, yearlong. The Middle Fork Sheep Creek 4x4 trail is open to motorized vehicles from May 16 to November 30 only. The area east of Garfield is closed to motorized vehicles yearlong with the exception of 3 major designated routes and snowmobiles are permitted from December 1 to May 15. Established trail systems, other than those used primarily for range management, could be used for foot travel to the places of interest in the area. Without 4x4, snowmobile and trailcycle use, these trails would be naturally narrowed in time.

The 10,206 acres of land tentatively suitable for timber production would not be available under this prescription. This would remove about 55 MMBF in standing volume. The standing volume is generally scattered in small isolated pockets.

The loss in timber volume may be mitigated by increasing the intensity of timber management on areas remaining in the timber base. Factors affecting the ability to mitigate this loss include total forest volume lost due to wilderness classification, other resource standards that affect the Forest's ability to increase intensity of timber management, and increased costs associated with more intensive management that may result in reduced PNV (present net value).

Current livestock grazing, 7860 AUM's, could continue on the portions of the 6 allotments involved but management practices may change. Presently, permittees use vehicles to access and manage livestock within affected allotments. If wilderness designation were to preclude this activity, permittees would have to adjust to using horses and pack mules. This would require more time and be more costly.

Intensive grazing systems now in effect would continue. Wilderness designation would preclude further vegetative manipulation, pipelines, water developments, and fences solely benefiting the range resource.

Wildlife habitats would not change much in the short-term period, because existing forage and timber security levels would be maintained. Long-term changes would occur in the forested areas as stands became older. Eventually these stands would become diseased, and trees would die and accumulate on the forest floor. Some loss of big game security cover would be expected if enough standing trees were lost. The danger of fire and/or insect infestation would also increase. Overall, wildlife habitat would not be seriously affected and existing wildlife populations would be provided for. Big game key habitats, such as meadows and sagebrush foraging areas would be maintained. Elk winter ranges would continue to provide necessary forage, because these areas are permanent grasslands.

Other nonpriced resource values are affected as follows:

> Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only, except in very small, site-specific instances and locations where visual impacts would be minor.
>
> Wilderness designation would increase the land base in the Wilderness Preservation System, provide ecological diversity in the System, most of the area is grassland with patches of forest on north facing slopes, and help to lessen the pressure placed on existing wildernesses by recreationists seeking wilderness and primitive recreation experiences.
>
> Existing elk security cover would be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries quality would be maintained at natural levels. Improvement projects such as structures to improve pool/riffle ratios, spawning area improvement, barrier removal, etc., will be restricted under wilderness management.

Social and economic effects center around the resource values of minerals, range, wildlife, recreation, and wilderness. Since wilderness precludes mineral development, the related industries would not be supported by this emphasis. The service sector, including resorts and outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness allocation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases. All of this area has very high favorability for oil and gas.

Exercise of valid existing rights on 3 mining claims will be severely restricted, but may have a substantial impact on the areas's wilderness character.

As of December, 1983, there were approximately 42,701 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

2. Designation: Nonwilderness
   Management Emphasis: Timber (Modification/Maximum Modification and Retention/Partial Retention) Under Alternative B

Small portions of the Garfield Mountain Roadless Area (1-961) are assigned to these prescriptions in Alternatives A, B, G and W.

Approximately 5 percent is assigned to timber management (visual quality objectives modification/maximum modification) will severely impact the wilderness and roadless resources in that timber removal modifies the natural appearance of the area for approximately 25 to 40 years, or until the regeneration is high enough to hide the scars and present the appearance of an old burn. The stumps and incompletely burned slash piles would probably be permanent intrusions in that they could be expected to last well beyond a rotation. The cutting units themselves would be impacts visible from considerable distance, whereas the stumps and burned slash piles would be short-term intrusions after the regeneration has grown to the height that would constitute big game hiding cover. After that, they would most likely be obvious only to someone passing through the stand.

Under timber prescriptions with visual quality objectives of retention/partial retention, there will be increased efforts to "fit" the cutting units and the road designs to the "lay of the land" to mitigate the visual impacts of the timber harvest activities. Most of the area to the east and north of Garfield Mt. can be seen from Interstate 15.

The associated roads, by definition, eliminate the "roadless" nature of an area, and any dirt-moving activities have extremely long-term impacts on the naturalness of the area--much longer than the actual timber harvest. Within a given timber sale area, the total area actually impacted by roads will probably be significantly less than that impacted by the cutting units, but the visual impact of the roads will be greater. Cutting units may be designed to reflect natural openings in the canopy and/or changes in the texture of the canopy. Roads may appear as unnatural, linear intrusions even when the actual road prism is screened by trees. Roads serve as travelways, inviting more use, providing much easier access, and lessening the opportunities for solitude in the area.

Range resources would benefit by the creation of transitory range which may become available for grazing. However, timber harvest may remove natural barriers requiring additional and costly fencing to maintain intensive management systems. Range activities, however, would not significantly affect the wilderness potential.

Other nonpriced resource values are affected as follows:

In areas where visual quality objectives are modification or maximum modification man's activities will dominate the landscape. Impacts will be evident not only within the timbered areas, but in nontimbered areas where roading occurs and from other areas within sight of the intensive timber management areas.

In areas where visual quality objectives are retention or partial retention, impacts will be evident but less severe than those created by more intensive timber management activities.

The opportunities for primitive and semi-primitive recreation opportunities will be severely reduced or eliminated under these prescriptions.

The scattered patches of timber in the Garfield area are very important for elk security. The degree of these security cover losses will relate to the magnitude of the timber harvest in the area.

Water quality and fisheries would be adversely affected but effects would be mitigated in accordance with Forest standards and guidelines.

In areas where visual quality objectives are retention/partial retention, use of smaller and irregular shaped harvest units may be required. Harvest will favor seral stands of lodgepole pine with some Douglas-fir. There will be a trend toward better distribution of age and size classes brought about through timber harvest.

These prescriptions provide for the greatest number of jobs in the timber and lumber manufacturing-related industries.

Social and economic effects center around the resource values of minerals, wildlife, recreation, grazing, and wilderness. Mineral resources would be available, thus supporting minerals industries. The change in recreation setting could be disruptive to those publics using the area for primitive or semi-primitive recreation; however, these publics would, most likely, shift their activities to less developed parts of the Forest. Likewise, outfitter and guide operations in the area could be affected by the change in the environment. Publics valuing wilderness would not be supported by this management emphasis. Grazing operations could be expanded where transitory range is created.

Allocation to prescriptions 10-15, 10-17, 10-18, 10-13, 9-12, 9-14, 14-14, 30-20, 30-16, 30-19, or 15-24 would not restrict access for mineral and energy resources. Allocation to prescriptions 12-22, 20-29, 23-32, 17-26, 5-5, 6-6, 33-7, 24-33, 32-34, 31-14, 19-28, 11-21, or 26-35 would moderately restrict access for mineral and energy resources. Allocation to NRT CORR prescription would severely restrict access for mineral and energy resources. All of this area has very high favorability for oil and gas.

3. Designation: Nonwilderness
Management Emphasis: Range (No Timber, High Intensity Range, and High Intensity Range and Low Intensity Wildlife)

Portions of the Garfield Mountain Roadless Area (1-961) are assigned to these prescriptions in Alternatives B, G, H, W and S. Alternative G has the maximum range assignment. Approximately 25 percent of area (1-961) is assigned to range in Alternative G.

Under these prescriptions, motorized use will likely increase slightly for range management and recreational purposes. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase slightly. The number of roads, both improved, constructed roads also could be expected to increase.
Area (1-961) is already under a fairly high intensive Range Management.With permittee cooperation there would be some increased opportunities for intensive range management under these prescriptions. Additional fencing, water developments, stocktrails, and sagebrush manipulation may result in increased AUM production. However, range activities under these prescriptions would not irretrievably affect the wilderness potential.

Other nonpriced resource values are affected as follows:

> Primitive and semi-primitive recreation opportunities may be adversely affected under some of these prescriptions; however, the impacts will not be as severe or as long-term as those encountered under timber prescriptions.
>
> Water quality and fisheries could be adversely affected, but effects would be mitigated in accordance with the Forest standards and guidelines.
>
> Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On isolated productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

From a social and economic standpoint, primary benefits would be realized by the grazing operations in the area that receives the expanded grazing opportunities or structural improvements which reduce the cost of management. Accessibility for other kinds of other resource management would generally be unaffected.

Allocation to prescription 15-24 would not restrict access for mineral and energy resources. Allocation to prescription 16-25 would moderately restrict access for mineral and energy resources.

4. Designation: Nonwilderness
   Management Emphases: Primitive and Semi-Primitive
   Recreation/Custodial

Large portions of the Garfield Mountain Roadless Area (1-961) are allocated to these prescriptions in Alternatives A, B, G, H, W and S; from 45 percent in Alternative G to 96 percent in Alternative A. The Garfield Mountain Recreation Area is included in this grouping in Alternative S (the Proposed Action).

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development and custodial management also allows road construction for access to other management areas. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline.

Range activities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

> Unless roading occurs for special uses or mineral development or to provide access to other management areas, visual quality will be retained.
>
> Elk security will be maintained in the short-term and slightly decreased in the long-term as timbered areas age and begin to deteriorate.
>
> Water quality and fisheries would not be affected by management activities.
>
> The absence of timber activities under these prescriptions will allow the lodgepole pine stands to become overmature and highly susceptible to mountain pine beetle. Eventually a beetle epidemic will kill the larger trees and leave an extreme fire hazard. If fire is allowed to occur naturally, the stands will again regenerate to lodgepole pine. If fire is excluded from the ecosystem, the stands will continue towards climax and greater diversity of species, age and size classes will result. There will be more representation of shade tolerant alpine fir, Engelmann spruce and Douglas-fir. Also, by excluding fire we would allow timber-range ecotones to become dominated by Douglas-fir rather than sagebrush.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. A variety of recreation experiences would be available including primitive, semi-primitive nonmotorized, and motorized recreation. The amenities of the area would continue to support outfitter and guide operations, resorts, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase under some prescriptions to protect the existing conditions to the extent possible. Grazing operations would continue as they currently do, with motorized access and mechanized equipment allowed.

Allocation to prescription 1-1 would not restrict access for mineral and energy resources. Allocation to prescriptions 8-9 would moderately restrict access for mineral and energy resources. Allocation to prescriptions 8-11, 35-41, 36-42, 39-45, 40-46, 41-47, 42-48, or 43-49 would severely restrict access for mineral and energy resources. All of this area has very high favorability for oil and gas.

5. **Designation:** Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian (No Timber)

Portions of the Garfield Mountain Roadless Area (1-961) are allocated to these prescriptions in Alternatives B, G, H, W and S; from as little as 9 percent in Alternative B to 43 percent in Alternative H.

The effects of implementing these prescriptions could be expected to be similar to, but more severe than, those described under "Management Prescription: Primitive and semi-primitive recreation/custodial," above. Some vegetative manipulation could be expected, the impacts of which could have varying degrees of severity on the wilderness capabilities of the area. These impacts, however, would be relatively short-term. Road building in these areas, to access other management areas, could be expected to cause the most severe and long-term impacts to the wilderness/roadless capabilities of the area.

Under the high intensity range and high intensity wildlife prescription, motorized use will probably notincrease much for range management. Structural and, to a lesser extent, nonstructural range improvements will impact the naturalness of the area. The number of such developments could be expected to increase. The number of roads, both improved, constructed roads and unimproved wheeltracks, also could be expected to increase slightly.

Range activities under low and moderate intensities would continue at present levels and would not significantly affect wilderness potential.

Other nonpriced resource values are affected as follows:

In general, visual quality will be retained. Vegetative manipulation practices may have some impacts on visual quality; however, these impacts will be localized and short-term. If roads are built for special uses or mineral development or to access other management areas, visual quality will be adversely impacted.

Management activities under these prescriptions should have few, if any, adverse impacts on primitive and semi-primitive recreation opportunities. Should roads be permitted for mineral development or to provide access to other management areas, primitive and semi-primitive recreation activities will be adversely affected.

The scattered patches of timber in the Garfield Mt. area are important for elk security. Elk security will be maintained in the short-term and decreased in the long-term as timbered areas age and begin to deteriorate.

In general, water quality and fisheries would be unaffected or only slightly adversely affected by management practices under these prescriptions. Adverse impacts would be mitigated. Under the riparian management, there will be opportunities to improve fisheries habitat.

Burning for range improvement would maintain timber-range ecotones in sagebrush, thereby limiting Douglas-fir composition. On productive sites the lack of timber activity with corresponding fire exclusion would favor an increase in Douglas-fir, subalpine fir, and Engelmann spruce. Representation of older age and larger size classes would increase.

Since these management emphases maintain the area much like the existing condition, current public uses would also be maintained. Present recreation uses would continue much as they have with possible restrictions where disturbance to wildlife or domestic grazing is to be avoided. Mineral exploration could occur in all prescriptions; however, cost of operations could increase with restrictions to accommodate wildlife and grazing. The tentatively suitable timber land that is unavailable could very slightly affect the jobs and income in the wood products industry. Grazing operations would continue with motorized access and use of mechanized equipment allowed.

Allocation to prescription 18-13 or 18-27 would not restrict access for mineral and energy resources. Allocation to prescriptions 4-4, 21-30, 25-14, 25-32, 26-36, or 38-35 would moderately restrict access for mineral and energy resources. Allocation to prescription 8-10 would totally restrict access for mineral and energy resources.

APPENDIX C - ROADLESS AREA EVALUATION
Targhee National Forest

Roadless Area Name:	1-961 Garfield Mountain	Gross Acres	Net Acres
	1-961 (Bvhd.)	42,701	42,701
	15961 (Targhee)	47,500	47,500
	Total	90,201	90,201

I. DESCRIPTION (Targhee National Forest)

The Garfield Mountain Roadless Area is shared by the Targhee National Forest in Region 4 and the Beaverhead National Forest in Region 1. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the divide is rare beause of the sharp topography of the mountain range.

The area is located approximately 22 air miles north of Dubois, Idaho in Clark County, Idaho; Targhee National Forest, Region 4. It extends along the Continental Divide from Medicine Lodge Pass on the west to Headquarter Creek, just west of Monida Pass.

A minor amount of primitive road lies within the roadless area, primarily as short extensions of the excluded road system. Few designated trails exist. One trail follows the Continental Divide through the roadless area; another links the headwaters of Middle Creek with the east and west forks of Indian Creek to the east.

The area is within the Rocky Mountain Forest Province, part of the Beaverhead Mountains. The area is adjacent to Targhee National Forest lands to the east and west. Beaverhead National Forest lands are adjacent to the north and land administered by the BLM forms most of the southern boundary. There are adjacent private lands on the northeast boundary and several State of Idaho lands are contiguous to the south. Beaverhead National Forest roadless area 1-961 Garfield Mountain is contiguous to the north.

Elevation ranges from about 7,500 to 10,100 feet. Relief is moderately rugged.

Vegetation on the higher areas is sparse. Below the slide rocks are alpine types of vegetation consisting of fingers of limber and lodgepole pine. Some aspen is abundant in the Modoc-Pleasant Valley area. The bulk of lower areas are open grass-sage with fingers of Douglas-fir and mountain mahogany up the canyons.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Influence on natural integrity by physical developments are moderate; influence on apparent naturalness is moderate. Natural integrity is broken by fences and ORV trails. These developments, stock watering troughs and ORV use have a moderate influence on naturalness.

Appearance: Visual quality objective as inventoried and as proposed for management are shown in the following table:

Visual Quality Objective	Inventory Acres	Target Acres
Preservation	0	0
Retention	660	900
Partial Retention	21,640	46,600
Modification	23,940	0
Max. Modification	1,260	0

B. OPPORTUNITIES FOR SOLITUDE

Opportunity for solitude is moderate. Topographic and vegetative screening reduce the opportunity for solitude. Permanent off-site intrusions are visible but distance obscures effect. Wilderness characteristics are enhanced by the presence of a contiguous area to the north on the Beaverhead National Forest.

C. PRIMITIVE RECREATION OPPORTUNITIES

Opportunity for primitive recreation is low.

D. OTHER FEATURES

There are no special scenic landmarks.

E. MANAGEABILITY AND BOUNDARIES

Boundaries are fairly well defined. Management would be compatible with adjacent lands. Coordination with Beaverhead National Forest and BLM would be necessary.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-961 Bvhd VALUE	1-961 Targhee VALUE	COMBINED VALUE
Acres				
Gross	Acres	42,701	47,500	90,201
Net	Acres	42,701	47,500	90,201
Recreation				
Primitive	RVD's	540	*	540
SPNM	RVD's	787	*	787
SPM	RVD's	779	*	779
Range				
Existing obligated suitable	Acres	39,667	38,000	77,667
Allotments	# of	6	9	15
AUM's	AUM's	7860	3900	11,760
Exist. Vacant Suit.	Acres	0	*	0
Allotments	# of	0	*	0

Resource Potentials, continued

Timber				
Tentative suitable	Acres	10,206	*	10,206
Standing Volume	MBF	55,312	*	55,312
Corridors				
Existing/Potential	# of	1	0	1
Wildlife T&E				
Bald Eagle	Acres	0	*	0
Big Game				
Winter Habitat	Acres	0	8600**	8600
Elk				
Winter Habitat	Acres	0	**	0
Deer				
Winter Habitat	Acres	0	**	0
Significant Fisheries				
Stream Miles	Miles	25.1	38.0	63.1
Stream Habitat	Acres	12.9	*	12.9
Lakes	# of	0	0	0
Lake Habitat	Acres	0	0	0
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	1500***	47,500	49,000
High	Acres	8555	0	8555
Moderate	Acres	32,646	0	32,646
Low	Acres	0	0	0
Claims	# of	3	*	3
Oil and Gas Potential				
Very High	Acres	42,701	0	42,701
High	Acres	0	0	0
Moderate	Acres	0	47,500	47,500
Low	Acres	0	0	0
Oil and Gas Leases				
Leased area	Acres	42,701	47,500	90,201

*Not available

**Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk habitat.

***VH for decorative stone; same acres are M for locatable minerals.

1. Recreation

Current Uses: Recreation use is limited, consisting mainly of hunting and snowmobiling. Some hiking, horseback riding, and off-road vehicle use also occurs. The area receives a limited amount of snowmobile use. It has limited opportunities to expand either developed or dispersed recreation, but it is a likely candidate for the Continental Divide Trail System.

Recreation opportunity spectrum (ROS) as inventoried and as proposed for management are shown in the following table:

Recreation Opportunity Spectrum	Inventory Acres	Planned Acres
ROS I Primitive	0	0
ROS II Semiprimitive Nonmotorized	11,800	11,800
ROS III Semiprimitive Motorized	30,200	17,200
ROS IV roaded Natural Appearing	18,500	5500
ROS V Rural	0	0

2. Wildlife

Deer, elk, and moose use the higher elevations for summer range and lower reaches for winter range. Mountain goats inhabit the area. Antelope also use the area for summer range. Numerous species of smaller mammals and birds also inhabit the area. Rocky Mountain wolf are believed to pass through the area, but none are verified sightings. Sage grouse are abundant at lower elevations. High mountain lake and wild resident trout fisheries are present. The eastern part of the area is elk and deer summer range and elk calving areas. There is a small amount of elk winter range.

3. Water

Watershed values are high. Streams that run year-long are an important source of irrigation water for farms and ranches below the Forest boundary.

4. Livestock Operations

There are parts or all of five sheep and four cattle allotments within the area. Some sagebrush spray projects have been carried out to improve range conditions and permittees have invested about $73,000 in range improvements. Currently the area provides about 3,900 AUM's of grazing. There is a potential to increase grazing by about 400 AUM's.

5. Ecology

The entire area is within the Douglas-fir Forest and the Western Spruce-fir Forest ecosystems. Ecological diversity is low to moderate as there is no extreme variation between elevation, temperature or moisture.

6. Timber

The area is not a heavy timber producer. However, there are volumes of Douglas-fir which could be harvested. There is a potential to harvest about .4 MMBF of timber per year.

7. Minerals/Oil and Gas
There are commercial deposits of travertine, a building stone presently being mined on the unit. The area is entirely covered by leases or applications for oil and gas leases. The area lies within the overthrust belt and has structures similar to the producing overthrust oil and gas fields in southwestern Wyoming and northeastern Utah. However, no discoveries have been made to date.

There may be a potential for oil and gas development as evidenced by the number of leases and lease applications. With a wilderness designation, existing mineral leases will still be valid; development would likely be more difficult. New leases would not be granted after January 1, 1984, so future development would be less likely.

8. Cultural Resources
Significant cultural resources are not known to exist.

9. Land Use Authorizations
There are no special uses that are incompatible with wilderness and no utility corridors in the area.

10. Non-Federal Lands
There are no private acres within this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS.

1. Fire
Part of the area is within the High Country Fire Management Area where some wildfire will be allowed to burn under certain prescribed conditions.

Management would need to be coordinated with BLM, private landowners, and the Beaverhead National Forest.

2. Insects and Disease

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers
The area is approximately 93 air miles southeast of the Frank Church River of No Return Wilderness, the nearest classified wilderness area. It is approximately 62 air miles north of Idaho Falls, Idaho.

2. Contribution to Wilderness Preservation System
There is no need for ecosystem representation within the National Wilderness Preservation System.

3. Public Interest
The area was supported for wilderness by Idaho conservation groups during RARE II. It was, however, designated for nonwilderness management in the RARE II EIS. There has been little interest expressed in wilderness designation during the roadless area reevaluation.

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TABLE A
ALTERNATIVE MANAGEMENT PRESCRIPTION FOR ROADLESS AREAS 1/
THOUSANDS OF ACRES

ROADLESS AREA
Name: Garfield Mountain
Number: 15961
Acres: 47,500

	ALTERNATIVE*							
MANAGEMENT PRESCRIPTION	A	B	C	D	E	F	G	H
RECOMMENDED FOR WILDERNESS DESIGNATION								47.5
NONWILDERNESS - MANAGED AS UNDEVELOPED								
Primitive								
Semi-Primitive Nonmotorized			11.8					
Semi-Primitive Motorized			17.2					
NONWILDERNESS - AVAILABLE FOR A FULL RANGE OF RESOURCE ACTIVITIES								
Roaded Natural Appearing	47.5	47.5	18.5	47.5	47.5	47.5	7.5	
Rural								
Development for Timber, Wildlife & Watershed Management	3.0	4.9		5.5	5.6	1.8	1.8	

* See the Targhee National Forest Draft EIS for a more detailed discussion of these alternatives.

TABLE B
ALTERNATIVE EFFECTS ON WILDERNESS CHARACTER

	ALTERNATIVE							
	A	B	C	D	E	F	G	H
RECOMMENDED WILDERNESS								
MAcres								47.5
Percent of Area								100
NONWILDERNESS								
Area Retaining Apparent Naturalness, Primitive Recreation Opportunity and Solitude (ROS I and II)								
MAcres			11.8					
Percent of Area			25					
Area Retaining Apparent Naturalness and Primitive Recreation Opportunity & Solitude (ROS III)								
MAcres			17.2					
Percent of Area			36					
Managed for a Full Range of Resource Activites (ROS IV & V)								
MAcres	47.5	47.5	18.5	47.5	47.5	47.5	47.5	
Percent of Area	100	100	39	100	100	100	100	
Planned for Development								
MAcres	3.0	4.9		5.5	5.6	1.8	1.8	
Percent of Area	6	10		12	12	4	4	
Remaining Essentially Undeveloped								
MAcres	44.5	42.6	18.5	42.0	41.9	45.7	45.7	
Percent of Area	94	90	39	88	88	96	96	

TABLE C
EFFECTS OF ALTERNATIVES ON PHYSICAL AND BIOLOGICAL ENVIRONMENT

		ALTERNATIVE							
RESOURCE ACTIVITY 1/	UNIT OF MEASURE	A	B	C	D	E	F	G	H
RECREATION									
Developed Sites	MRVD 2/								
Dispersed Sites	MRVD	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.1
WILDLIFE									
Habitat Improvement									
Acres	MAcres	.122	.122	.122	.122	.122	.122	.122	
Structures	Structures	8.4	8.4	8.4	8.4	8.4	8.4	8.4	
LIVESTOCK GRAZING									
Cattle	MAUM 3/	5265	5292	5237	5414	5237	5530	4608	2922
Sheep	MAUM	6760	6795	6725	6950	6725	7099	6760	3752
TIMBER									
Programmed Sales Offered									
Douglas-fir	MMBF 4/	.2	.5		.5	.5	.2	.2	
Lodgepole pine	MMBF	.4	.1		.1	.1			
Fuelwood	MMBF								
Reforestation	MAcres	.04	.04		.04	.04	.01	.01	
Timber Stand Improvement	MAcres								
SOIL AND WATER									
Water Meeting Quality Goals	MAc.Ft. 5/	10.8	10.8	10.7	10.8	10.8	10.8	10.8	10.8
Soil & Water Resource Imp.	Ac.	1.1	1.1	1.1	1.1	1.1	1.1	1.1	.6
MINERALS	Operating Plans	34.2	34.2	.9	22.4	11.7	21.7	22.4	2
PROTECTION									
Fire Management Effectiveness	$/MAc.	137.8	137.8	137.8	137.8	137.8	137.8	137.8	137.8
Fuelbreaks & Treatment	MAc.	.10	.08	.10	.08	.10	.10	.10	.10
ROAD CONST./RECON. (Local)	Miles	1.2	1.2		1.2	1.2	0.4	0.4	

1/ All values are annual averages for the period 1984 through 1990.
2/ MMRVD = Thousand recreation visitor days.
3/ MAUM = Thousand animal unit months.
4/ MMBF = Million board feet.
5/ MAc. Ft. = Thousand acre feet.

B. Impacts

The following information is specific to the Targhee National Forest portion of this roadless area. The detailed discussion of the Beaverhead National Forest portion of this roadless area immediately precedes the Targhee discussion in this document.

1. Effects of Wilderness/Nonwilderness Prescriptions

Displayed in the tables on the following pages are management prescriptions, effects on wilderness characteristics and resource outputs for each alternative.

This roadless area is contiguous to a roadless area on the Beaverhead National Forest in Montana. In combination, the areas make up the Garfield Mountain roadless area. The Beaverhead National Forest will complete a roadless area reevaluation after the Targhee. The Beaverhead's draft environmental impact statement will contain an analysis and preferred alternative for the entire roadless area. The material presented in this section applies only to the portion of the area on the Targhee National Forest and may be modified by additional analysis of the entire area.

In alternative H, most of the area would be recommended for wilderness designation. In alternative C, none of the area would be recommended for wilderness, but about 60 percent would be managed as unroaded and undeveloped. All other alternatives specify management for a full range of resource activities.

All alternatives except C and H would result in significant reductions in the areas apparent naturalness, opportunities for primitive recreation and solitude. These same characteristics would be significantly reduced in alternative C, but only on about 40 percent of the area. All wilderness characteristics would be retained under alternative H.

Alternatives A, B, D and E would result in the greatest outputs of timber. Alternatives D and F would produce the greatest amount of grazing. Mineral development would be most likely in alternatives A and B. Wildlife habitat capability would be highest under alternative H.

2. Preferred Alternative (Alternative C)*

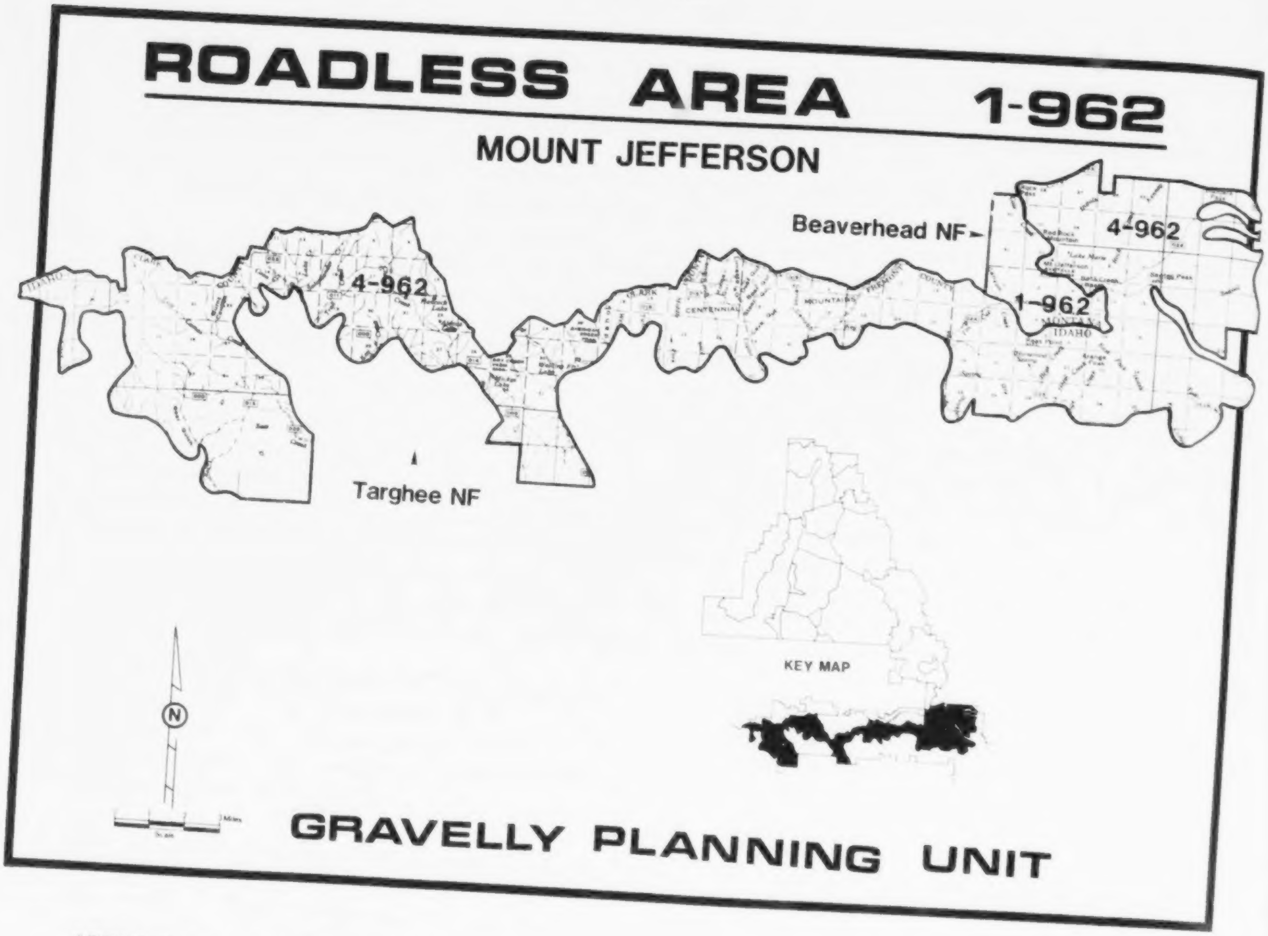
About 40 percent of the area (18,500 acres) would be available for a full range of resource activities during the period 1984-1990. There are no activities planned during the first decade that would significantly affect wilderness character. Unless mineral development occurs, there would be no irretrievable or irreversible effects on wilderness character.

Sixty percent of the area would be managed as ROS I and III which requires that roads, drill pads, etc. be obliterated and returned to natural conditions.

No timber harvest is planned during the first decade. The area is included in the timber base for calculation of long-term sustained yield; however, actual harvest would depend on direction contained in the next major Forest Plan revision.

All 47,500 acres are recommended to the Beaverhead National Forst for nonwilderness designation in the preferred alternative. The actual recommendation to be incorporated into the Targhee Forest Plan will depend on the results contained in the Final EIS for the Beaverhead Forest Plan.

*Alternative C is comparable to Alternative S of the Beaverhead National Forest.


ROADLESS AREA 1-962
MOUNT JEFFERSON
Beaverhead NF
4-962
4-962
1-962
Targhee NF
N
KEY MAP
GRAVELLY PLANNING UNIT

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-962 Mt. Jefferson	Gross Acres	Net Acres
Beaverhead National Forest	4,474	4,474
Targhee National Forest	60,000	60,000
Bureau of Land Management	26,034	26,034
Total	90,508	90,508

I. DESCRIPTION

The Mt. Jefferson Roadless Area is on the southernmost tip of the Madison Ranger District and borders the State of Idaho. It includes Red Rock Mountain, Mt. Jefferson, Reese Peak and the headwaters of Hellroaring Creek. The Continental Divide forms the southern boundary. Access is from Red Rock Pass on the north or from roads leading to the Continental Divide in Idaho. This area is small, very isolated and inaccessible.

The area is dominated by rocky peaks and one main canyon. Elevations range from about 7,200 to over 10,000 feet.

Soils in the high valley are silt loam.

Vegetative cover is predominantly grassland/sagebrush. There are scattered areas of forest which are mostly lodgepole pine or Douglas-fir stands. There are also scattered patches of aspen and open Douglas-fir.

This high elevation alpine country is surrounded by land which has few high peaks and more gentle terrain. It is adjacent to the Centennial Mountains Primitive Area and the U.S. Sheep Experimental Station.

(The Anderson Mountain Roadless Area is shared by the Beaverhead National Forest in Region 1 and the Targhee National Forest in Region 4. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.)

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Except for a small area on the east side which and has been contour furrowed for erosion control, this roadless area is quite natural appearing. Sawtell Peak Radar Station can be seen from many locations, but it ranges from one to three miles in distance from these locations. It is very isolated and inaccessible and could be enhanced with the inclusion of contiguous roadless area 1-962 and the Centennial Mountains Primitive Area.

B. OPPORTUNITIES FOR SOLITUDE

The size of the Beaverhead Forest portion of this area limits the opportunities for solitude.

C. PRIMITIVE RECREATION OPPORTUNITIES

Camping, fishing and hunting are the primitive recreation oportunities.

D. OTHER FEATURES

Mt. Jefferson and the high elevation, above timberline character and the Continental Divide trail along the state line/Forest boundry are primary features of the area.

E. MANAGEABILITY AND BOUNDARIES

Changing boundaries to exclude intrusions would be possible, but would affect the area's size. Any changes in the boundary to exclude intrusions would make the area too small to meet the criteria for wilderness without considering adjoining areas. The Bureau of Land Management and Targhee National Forest are proceeding with a wilderness study of this area and the adjoining Centennial Mountain primitive area.

The western boundary of this area adjoins primitive uses. These lands are administered by three different Federal agencies. Boundary adjustments which might improve wilderness management would reduce wilderness opportunities.

Beaverhead NF

1977 Inventory Acres:	4600 gross	4600 net
1983 Inventory Acres:	4474	4474
Change	- 126	- 126

Change in inventoried acres is due to acre recalculation done in the current Forest planning process.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-962 Bvhd. VALUE	1-962 Targ. VALUE	COMBINED VALUE
Gross Acres:	Acres	4474	60,000	64,474
Net Acres:	Acres	4474	60,000	64,474
Recreation				
Primitive	RVD's	56	*	56
SPNM	RVD's	82	*	82
SPM	RVD's	81	*	81
Range				
Exist. obligated suitable	Acres	0	29,200	29,200
Allotments	# of	1	*	1
AUM's	AUM's	0	*	0
Existing vacant suitable	Acres	0	*	0
Allotments	# of	0	*	0
Timber				
Tentative suitable	Acres	590	*	590
Standing Volume	MBF	3532	*	3532
Corridors				
Existing/Potential	# of	0	*	0
Wildlife T&E				
Bald Eagle	Acres	0	*	0
Big Game				
Winter Habitat	Acres	0	56,300**	56,300
Elk				
Winter Habitat	Acres	0	**	0
Deer				
Winter Habitat	Acres	0	**	0
Significant Fisheries				
Stream Miles	Miles	4.3	66.0	70.3
Stream Habitat	Acres	3.2	*	3.2
Lakes	# of	0	*	0
Lake Habitat	Acres	0	50	50

Resource Potentials, cont.

Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	0	7000	7000
High	Acres	0	0	0
Moderate	Acres	4474	0	4474
Low	Acres	0	53,000	53,000
Claims	# of	1	*	1
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	4474	19,100	23,574
Low	Acres	0	41,000	41,000
Oil and Gas Leases				
Leased area	Acres	2364	20,500	22,864

*Not Available

**Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk Habitat.

1. Recreation

Recreation potentials consist mainly of backpacking, camping and hunting. In addition to existing hunting, fishing, and snowmobile use, there is a potential opportunity for increased dispersed recreation along the Continental Divide National Scenic Trail. Few opportunities for developed recreation exist.

2. Wildlife

Deer, elk and moose use this area for summer/fall range; blue grouse and other small birds and mammals occupy the area.

3. Water

This roadless area forms the headwaters of Hellroaring Creek. There are no lakes or important fisheries. As the unit includes some higher elevations, this is a water producing area. Mount Jefferson reaches the 10,000-foot level and the snow pack is normally heavy. Water from melting snow filters down to Camas Creek, the Henry's Fork of the Snake River and Mud Lake.

4. Livestock Operations

The roadless area contains part of one allotment which provides summer range for two permittees.

5. Ecology

The ecological diversity of the area is moderate due primarily to change in elevation and associated climatic changes. It is within the Douglas-fir Forest ecosystem and the Western spruce-fir Forest ecosystem.

6. Timber
The Mountain Jefferson Roadless Area on the Beaverhead has approximately 590 acres of suitable timber land with a growing stock of 3.5 MMBF. This timber is scattered and would be uneconomical to harvest using current methods.

7. Minerals/Oil and Gas
Geologic favorability for locatable minerals is moderate. This area has been prospected and there is some evidence of old roads and mining operations. Part of this area is in a phosphate reserve. Geologic favorability for oil and gas is moderate. Part of the area is leased for oil and gas.

8. Cultural Resources
No significant cultural resources are known to exist.

9. Land Use Authorizations
No incompatible land uses are authorized for this area.

10. Non-Federal Lands
There are no private lands in the Beaverhead portion of this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
There is a low incidence of fire at this time. As no timber harvest is planned in this area where the mountain pine beetle is eliminating lodgepole pine, the incidence of fire can be expected to increase.

2. Insect and Disease
Lodgepole pine in this roadless area is infested with mountain pine beetle.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers.
The Lee Metcalf Wilderness Area is about 20 miles away; the Bridger-Teton is approximately 100 miles. The nearest population center of 30,000 is within 200 miles. Use in these areas is moderate.

2. Contribution to Wilderness Preservation System
This area would contribute ecological diversity to the National Wilderness Preservation System, representing some low and mid-elevation grass and grass-sagebrush steppes with moderate topographical relief.

3. Public Interest
During the RARE I evaluation this area was inventoried as Red Rock #58. This area independently received little interest for a wilderness classification unless considered with the contiguous Targhee and Bureau of Land Management portions.

Area 1-962 was supported for wilderness designation by conservation groups during the RARE II process. A recent public sensing by the BLM and Targhee National Forest seeking public opinion on a proposal to study the area for wilderness indicated that the majority of people desired to see the study undertaken. The BLM and Forest Service will proceed with a joint wilderness study.

In general, those who addressed the Mt. Jefferson area in 1985 comments favored wilderness designation of this area through the Centennial Mountains Wilderness Study. There was no specific opposition to wilderness designation of this area expressed by commentors.

V. ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

A. Management Emphasis by Alternative

Alternative Assignment for the Mt. Jefferson Roadless Area (1-962)

Management Emphases	Alternative (Net Acres) A	B	C	D	F	G	H*	I	W	S**
Targhee NF										
Wilderness:	0	0	0	0	0	0	0	60,000	0	
Nonwilderness:	60,000	60,000	60,000	60,000	60,000	60,000	60,000	0	60,000	
Beaverhead NF										
Group 1: 1/	***	0	***	***	***	***	***	4474	***	***
Group 2: 2/	0	0	0	0	0	0	0	0	0	0
Group 3: 3/	0	0	0	0	0	0	0	0	0	0
Group 4: 4/	0	4474	0	0	0	0	0	0	0	0
Group 5: 5/	0	0	0	0	0	0	0	0	0	0
Beaverhead NF Total:	4474	4474	4474	4474	4474	4474	4474	4474	4474	4474
Targhee NF Total:	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	
Roadless Area Total:	64,474	64,474	64,474	64,474	64,474	64,474	64,474	64,474	64,474	64,474

* Land designations for Alternatives H, HA, and H(dept) are the same; therefore only H is displayed.

** Land designations for Alternatives S and SA are the same; therefore only S is displayed.

*** Roadless Area 1-962 (Mt. Jefferson) is contiguous to a larger roadless area administered by the BLM. Designation in all alternatives except A, I and B is deferred pending a decision on the remainder of the area. In Alternative A, the area is designated as Further Planning. In Alternatives, A, C, D, F, G, H and W, the acres are not reflected in the wilderness total.

1/ Group 1 is Wilderness emphasis.

2/ Group 2 is Timber emphasis.

3/ Group 3 is High Range, High Range with Low Intensity Wildlife, (No Timber) emphasis.

4/ Group 4 is Primitive/Semi-Primitive Recreation, Custodial emphasis.

5/ Group 5 is High Range/High Wildlife, Moderate/Low Range, Wildlife (No Timber) emphasis

Summary of Management Emphasis*

Management Emphasis	Alternative (Net Acres) A CD**	B	C	D	F	G	H	I	W	S PA***
Roaded:										
Decade 1	0	0	0	0	0	0	0	0	0	0
Decade 5****	0	0	0	0	0	0	0	0	0	0
Roadless:										
Decade 1	4474	4474	4474	4474	4474	4474	4474	0	4474	4474
Decade 5****	4474	4474	4474	4474	4474	4474	4474	0	4474	4474
Wilderness:	0	0	0	0	0	0	0	4474	0	0

* The Summary of Management Emphasis for the Salmon Portion of Roadless Area 1-962 is not displayed, because that Forest has not yet finalized its alternatives. Only the wilderness/nonwilderness question has been addressed. For more specific information regarding the impacts of wilderness, nonwilderness roaded, and nonwilderness unroaded management on the Salmon National Forest portion of Area 1-962, refer to the Targhee Impact discussion beginning on page C-595 of this document.

** CD is the Current Direction Alternative.

*** PA is the Proposed Action Alternative.

**** The "decade 5" projection represents what would occur in 50 years if implementation of the management designations and activity schedules associated with each alternative were perpetuated through the 10 - 15 year periodic revisions.

B. Impacts

The following information is specific to the Beaverhead National Forest portion of this roadless area. The detailed discussion of the Targhee National Forest lportion of this roadless area immediately follows the Beaverhead discussion in this document.

1. Designation: Wilderness
Management Emphasis: Wilderness-Beaverhead Forest Portion

The Mt. Jefferson Roadless Area (1-962) is contiguous to a larger roadless area administered by the BLM. Designation in all alternatives except A, I and B is deferred pending a decision on the remainder of the area. In Alternative A, the area is designated as Further Planning. In Alternative I, the area is designated as wilderness.

Wilderness would protect the area's wilderness experiences of inaccessibility and primitive camping, hunting or fishing experience. The wilderness attributes would be enhanced if the Targee and BLM portions in Idaho are also designated wilderness.

Wildlife habitats for elk, deer and moose would not significantly change, because existing forage and security levels would be maintained.

Other nonpriced resource values:

Visual quality would be retained and, over time, improved. The assigned "preservation" VQO would allow ecological changes only.

Wilderness designation would increase the land base in the Wilderness Preservation System.

Water quality and fisheries quality would be maintained at natural levels.

Social and economic effects center around the resource values of minerals, wildlife, recreation, and wilderness. Since wilderness precludes mineral development, the mineral industry would not be supported by this emphasis. The service sector, including outfitter and guide operations, could benefit from the attraction of wilderness. From a social aspect, the publics valuing wilderness would be supported. Although grazing would be allowed in wilderness, the everyday operations probably would be managed through nonmechanical means, such as access by horse rather than by truck. This change could require more time and have higher costs to the grazing operators. Hunting and other recreational experiences would also be altered to those that could occur without vehicular access.

Under a wilderness designation, this area would be closed to further mineral entry (claim location) and leasing. Removal of this acreage from the resource base leaves less acreage available for mineral and energy resource exploration. The overall probability that these resources can be found and developed will decrease as the resource base available to explore decreases.

Exercise of valid existing rights on 1 mining claim will be severely restricted, but may have a substantial impact on the area's wilderness character.

As of December, 1983, there were approximately 2,364 acres of oil and gas leases issued with surface occupancy. Exercise of rights granted to lessees or assignees by lease issuance could severely impact the wilderness character of the area.

4. Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

The Mt. Jefferson Roadless Area (1-962) is assigned these prescriptions in Alternative B. The effects discussed would occur in this alternative only.

As long as areas managed under primitive and semi-primitive recreation and custodial emphases remain roadless, they will retain existing wilderness/ roadless capabilities. However, the prescriptions in this category allow roading for special uses or mineral development. If roads are constructed, wilderness capabilities will be foregone, and visual qualities and opportunities for solitude and primitive and semi-primitive recreation will decline. Roads could adversly effect big game to where they would stay out of areas near roads to avoid human encounters.

This area would be open to further mineral entry (claim location) and leasing, but access would be moderately restricted to lesson the impact or soils and visual quality.

Other nonpriced resource values:

Visual Quality will be retained unless roading occurs.

This is a watershed area and the impact of roads construction or mineral development could adversely effect water quality and fisheries.

Since these management emphases maintain the area much like the existing condition, current public recreation uses would also be maintained. The amenities of the area would continue to support outfitter and guide operations, and other service-oriented businesses. Mineral exploration could occur; however, cost to operations would likely increase to protect the existing conditions to the extent possible.

APPENDIX C - ROADLESS AREA EVALUATION
Beaverhead National Forest

Roadless Area Name: 1-962 Mount Jefferson	Gross Acres	Net Acres
Beaverhead National Forest	4,474	4,474
Targhee National Forest	60,000	60,000
Bureau of Land Management	26,034	26,034
Total	90,508	90,508

I. DESCRIPTION (Lead Forest - Targhee #15962)

The Mount Jefferson Roadless Area is shared by the Targhee National Forest in Region 4 and the Beaverhead national Forest in Region 1. The Continental Divide, marking the Montana-Idaho border, splits the area into two distinct units. Travel from one unit to the other over the Divide is rare because of the sharp topography of the mountain range.

The Mount Jefferson roadless area is south and west of Henry's Lake and extends westward along the Continental Divide to the West Camas Creek area. The eastern end of the area is approximately 18 air miles from West Yellowstone, Montana and the western end is approximately 25 air miles from Dubois, Idaho.

Existing primitive roads do exist that have served past resource activities such as range and watershed management as well as timber. The Keg Springs and the East Dry Creek roads cross the area and access lands administered by the Sheep Experiment Station. A major road, the Sawtelle Peak road penetrates the east end of the area accessing a site maintained by the Federal Aviation Administration. The Continental Divide trail follows the divide across the area.

This area is situated at the top of the Centennial Mountain Range within the Rocky Mountain Forest Province. This area is bounded to the north by the BLM Centennial Mountain Pimitive Area, the Sheep Experiment Station and Mount Jefferson roadless area on the Beaverhead National Foest. The northern boundary is common with the Continental Divide. The southern boundary generally adjoins Targhee National Forest except south of Mickey's Lake where the area adjoins public and private lands.

Elevations range from 7,000 feet to in excess of 10,000 feet at several peaks along the east-west trending Centennial Range. Relief is moderate. Slope gradients range from gentle to moderately steep.

Primary vegetative habitat types include alpine turf, which occurs in upper elevations and consists of short growing season grass and forbs, sagebrush/grass, Douglas-fir and lodgepole pine, which occupies the lower slopes. Aspen is abundant.

II. CAPABILITY

A. NATURAL INTEGRITY AND APPEARANCE

Influence on natural integrity by physical developments are high; influence on apparent naturalness is moderate. Physical developments tend to divide the area. With the exception of the phosphate prospects and watershed projects most developments little effect naturalness. Even though roads and developments have segmented the area, the segments are contiguous to the BLM primitive area lands and the individual segments meet minimum wilderness qualifications.

Appearance: Visual quality objective as inventoried and as proposed for management are shown in the following table:

Visual Quality Objective	Inventory Acres	Target Acres
Preservation	0	0
Retention	11,433	8,830
Partial Retention	37,169	10,882
Modification	15,480	14,888
Max. Modification	512	0

B. OPPORTUNITIES FOR SOLITUDE

Opportunity for solitude is low. Topographic and vegetative screening do not contribute to the opportunity for solitude.

C. PRIMITIVE RECREATION OPPORTUNITIES

The opportunity for primitive recreation is enhanced by the Continental Divide Trail, but the opportunities for challenging experiences are rare.

Overall opportunities for primitive recreation are rated as moderate.

D. OTHER FEATURES

This area contains no special landmarks.

E. MANAGEABILITY AND BOUNDARIES

The existing southern boundary would be difficult to manage because it falls at midslope and is difficult to locate on the ground. The northern boundary adjoins primitive uses. These lands are administered by three different Federal agencies. Boundary adjustments which might improve wilderness management would reduce wilderness opportunities.

III. AVAILABILITY

A. RESOURCE POTENTIALS

CATEGORY	UNIT	1-962 Bvhd. VALUE	1-962 Targ. VALUE	COMBINED VALUE
Gross Acres:	Acres	4474	60,000	64,474
Net Acres:	Acres	4474	60,000	64,474
Recreation				
Primitive	RVD's	56	*	56
SPNM	RVD's	82	*	82
SPM	RVD's	81	*	81
Range				
Exist. obligated suit.	Acres	0	29,200	29,200
Allotments	# of	1	*	1
AUM's	AUM's	0	*	0
Existing vacant suit.	Acres	0	*	0
Allotments	# of	0	*	0
Timber				
Tentative suitable	Acres	590	*	590
Standing Volume	MBF	3532	*	3532
Corridors				
Existing/Potential	# of	0	*	0
Wildlife T&E				
Bald Eagle	Acres	0	*	0
Big Game				
Winter Habitat	Acres	0	56,300**	56,300
Elk				
Winter Habitat	Acres	0	**	0
Deer				
Winter Habitat	Acres	0	**	0
Significant Fisheries				
Stream Miles	Miles	4.3	66.0	70.3
Stream Habitat	Acres	3.2	*	3.2
Lakes	# of	0	*	0
Lake Habitat	Acres	0	50	50
Water Developments				
Existing	# of	0	0	0
Minerals				
Very High	Acres	0	7000	7000
High	Acres	0	0	0
Moderate	Acres	4474	0	4474
Low	Acres	0	53,000	53,000
Claims	# of	1	*	1
Oil and Gas Potential				
Very High	Acres	0	0	0
High	Acres	0	0	0
Moderate	Acres	4474	19,100	23,574
Low	Acres	0	41,000	41,000
Oil and Gas Leases				
Leased area	Acres	2364	20,500	22,864

*Not Available

**Winter and Summer Range for the Targhee portion has been combined and includes Deer and Elk Habitat.

1. Recreation

There are no developed recreation facilities. A limited amount of dispersed recreation use occurs, mostly hunting in the fall. Some snowmobile activity takes place during the winter months. Little use is occurring on the Continental Divide Trail at this time.

In addition to existing hunting, fishing, and snowmobile use there is a potential opportunity for increased dispersed recreation along the Continental Divide Trail. Few opportunities for developed recreation exist.

Recreation opportunity spectrum (ROS) as inventoried and as proposed for management are shown in the following table:

Recreation Opportunity Spectrum	Inventory Acres	Planned Acres
ROS I Primitive	0	0
ROS II Semiprimitive Nonmotorized	41,400	45,300
ROS III Semiprimitive Motorized	14,800	0
ROS IV roaded Natural Appearing	8,400	19,300
ROS V Rural	0	0

2. Wildlife

Elk, deer, and moose inhabit the area along with innumerable nongame species. Because of deep snow and dense timber the only ungulate found in the unit during the winter would be an occasional moose. Much of the area is elk summer range.

Little fishing opportunity exists in the area. Some fishing occurs in Aldous and Hancock Lakes.

3. Water

As the unit includes some higher elevations, this is a water producing area. Sawtelle and Mount Jefferson reach the 10,000 foot level and normally the snowpack is very heavy. The water from the melting snow filters down to Camas Creek, the Henry's Fork of the Snake River and Mud Lake. A watershed rehabilitation project, consisting of contour trenches, was constructed in the head of Rock Creek in the early 1960's.

4. Livestock Operations

This area contains portions of several sheep and cattle allotments. The allotments are grazed through the summer with livestock coming off the Forest in the fall. This area presently has a potential to increase livestock use. Wilderness designation would preclude the opportunity to increase grazing use.

5. Ecology

The entire area is within the Douglas-fir Forest ecosystem and the Western Spruce-fir Forest ecosystem. The ecological diversity of the area is moderate due primarily to change in elevation and associated climatic changes.

6. Timber
The unit is covered with lodgepole stands on about one-half of the area. These stands occur at the lower elevations of the unit. The lodgepole is currently intensely infested with mountain pine beetle resulting in extremely high mortality of sawtimber-size trees. The upper one-half of the unit varies from some lodgepole stands to some Douglas-fir stands on steeper slopes. At the higher elevations these stands include alpine fir and Engelmann spruce; finally ending in pure limber pine stands. The highest ranges in this unit are above timberline. The land management planning process predicted a yield of in excess of 2.0 MMBF per annum for the next 4 decades.

Several timber sales have occurred in the unit prior to RARE II; most are closed at this time.

7. Minerals/Oil and Gas
The area contains phosphate deposits of known commercial quality. Mining has occurred here; but, because of transportation costs to the Simplot plant west of Pocatello, this operation was shut down. The Company doesn't expect to renew the operation until their supply of phosphate in the Soda Springs area is exhausted (50-100 years from now).

Several old mines exist in this unit which are thought to have been dug for gold; however, no activity has been observed for the past 30 years. No records exist which indicate the presence of any valuable metallic ores in this unit.

Some common variety building stone is removed from this area.

With a wilderness designation, existing mineral leases will still be valid; development would likely be more difficult. New leases would not be granted so future development would be less likely.

8. Cultural Resources
No significant cultural resources are known to exist.

9. Land Use Authorizations
There are no compatible special uses.

10. Non-Federal Lands
No private acres are included within this roadless area.

B. OTHER MANAGEMENT CONSIDERATIONS

1. Fire
Much of this area is within the High Country fire management area where some wildfire is allowed to burn within prescribed conditions.

2. Insects and Disease
Due to the mountain pine beetle infestation and spruce budworm outbreak an opportunity exists to salvage lodgepole pine and Douglas-fir.

IV. NEED

1. Proximity to Other Designated Wilderness and to Population Centers
This area is approximately 50 air miles west of the Teton Wilderness, the nearest classified wilderness. It is approximately 58 air miles north of Idaho Falls, Idaho.

2. Contribution to Wilderness Preservation System
There is no need for ecosystem representation within the National Wildlerness Preservation System.

3. Public Interest
A portion of this area was supported for wildeness designation by Idaho conservation groups during the RARE II process. A recent public sensing by the BLM and Targhee National Forest seeking public opinion on a proposal to study the area for wilderness indicated that the majority of people contacted desired to see the study undertaken. The BLM and Forest Service will proceed with a joint wilderness study.

The Bureau of Land Management and Targhee National Forest are proceeding with a wilderness study of this area and the adjoining Centennial Mountain primitive area. Contiguous roadless areas on the Beaverhead National Forest will also be considered.

TABLE A
ALTERNATIVE MANAGEMENT PRESCRIPTION FOR ROADLESS AREAS 1/
THOUSANDS OF ACRES

ROADLESS AREA
Name: Mount Jefferson
Number: 15962 and I-962
Acres: 64,600

MANAGEMENT PRESCRIPTION	ALTERNATIVE*							
	A	B	C	C	E	F	G	H
RCOMMENDED FOR WILDERNESS DESIGNATION								64.6
NONWILDERNESS - MANAGED AS UNDEVELOPED								
Primitive								
Semi-Primitive Nonmotorized	45.3	45.3	45.3	45.3	45.3		45.3	
Semi-Primitive Motorized								
NONWILDERNESS - AVAILABLE FOR A FULL RANGE OF RESOURCE ACTIVITIES								
Roaded Natural Appearing								
Rural	19.3	19.3	19.3	19.3	19.3	19.3	64.6	19.3
Developed for Timber, Wildlife and Watershed Management	13.4	14.0	11.9	15.5	16.7	7.4	7.4	

* See the Targhee National Forest Draft EIS for a more detailed discussion of these alternatives.

TABLE B
ALTERNATIVE EFFECTS ON WILDERNESS CHARACTER

	ALTERNATIVE A	B	C	D	E	F	G	H
RECOMMENDED WILDERNESS								
MAcres								64.6
Percent of Area								100
NONWILDERNESS								
Area Retaining Apparent Naturalness, Primitive Recreation Opportunity and Solitude (ROS I & II)								
MAcres	45.3	45.3	45.3	45.3	45.3		45.3	
Percent of Area	70	70	70	70	70		70	
Area Retaining Apparent Naturalness and Primitive Recreation Opportunity (ROS III)								
MAcres								
Percent of Area								
Managed for a Full Range of Resource Activities (ROS IV & V)								
MAcres	19.3	19.3	19.3	19.3	19.3	64.6	19.3	
Percent of Area	30	30	30	30	30	100	30	
Planned for Development								
MAcres	13.4	14.0	11.9	15.5	16.7	7.4	7.4	
Percent of Area	21	22	18	24	26	11	11	
Remaining Essentially undeveloped								
MAcres	5.9	5.3	7.4	3.8	2.6	57.2	11.9	
Percent of Area	9	8	11	6	4	89	18	

TABLE C
EFFECTS OF ALTERNATIVES ON PHYSICAL AND BIOLOGICAL ENVIRONMENT

RESOURCE ACTIVITY 1/	UNIT OF MEASURE	ALTERNATIVE A	B	C	D	E	F	G	H
RECREATION									
Developed Sites	MRVD 2/								
Dispersed Sites	MRVD	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
WILDLIFE									
Habitat Improvement									
Acres	MAcres	.1	.1	.1	.1	.1	.1	.1	.1
Structures	Structures	6	6	6	6	6	6	6	6
LIVESTOCK GRAZING									
Cattle	MAUM 3/	2.79	2.81	2.78	2.81	2.78	2.87	2.79	2.71
Sheep	MAUM	3.96	3.98	3.94	3.98	3.94	4.06	3.96	3.84
TIMBER									
Programmed Sales	Offered								
Douglas-fir	MMBF 4/	1.0	1.0	1.0	1.0	1.0	.3	.3	
Lodgepole pine	MMBF	.8	.8	1.2	.8	.8	.7	.7	
Fuelwood	MMBF	.7	.7	.5	.7	.7	.7	.7	
Reforestation	MAcres	.19	.19	.14	.19	1.9	.14	.14	
Timber Stand Imp.	MAcres								
SOIL AND WATER									
Water Meeting Quality Goals	MAc Ft. 5/								
Soil and Water Resource Imp.	Ac.								
MINERALS	Operating Plans	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
PROTECTION									
Fire Management Effectiveness	$/MAc.	138	138	138	138	138	138	138	138
Fuelbreaks & Treatment	MAc.	.01		.01		.01	.06	.01	.01
ROAD CONST./RECONST. (Local)	Miles	3.9	3.9	4.0	2.4	3.9	2.7	2.7	

1/ All values are annual averages for the period 1984 through 1990.
2/ MMRVD = Thousand recreation visitor days.
3/ MAUM = Thousand animal unit months.
4/ MMBF = Million board feet.
5/ MAc. Ft. = Thousand acre feet.

B. Impacts

(The following information is specific to the Targhee National Forest portion of this roadless area. The detailed discussion of the Beaverhead National Forest portion of this roadless area immediately precedes the Targhee discussion in this document.)

1. Effects of Wilderness/Nonwilderness Prescriptions

Displayed in the tables on the following pages are management prescriptions, effects on wilderness characteristics and resource outputs for each alternative.

Alternative H specifies that the area be recommended for wilderness designation. Alternative F specifies that the entire area be managed for a full range of activities. All other alternatives call for about 70 percent of the area (45,300) acres to be managed as unroaded and undeveloped with the remainder available for a full range of resource activities.

Wilderness characteristics of the entire area would be retained in alternative H. All other alternatives, except F, would specify management to retain wilderness attributes of apparent naturalness and opportunities for solitude and primitive recreation on 45,300 acres. Special features and opportunities for challenging experiences would not be significantly affected in any alternative.

Alternatives A, B, C, D and E would result in production of significant amounts of timber, with alternative C producing slightly more than the others. The highest level of grazing would occur in alternatives F, B and D. Wildlife habitat would be highest in alternative H.

2. Preferred Alternative (Alternative C)*

A joint Forest Service/BLM wilderness study of the area and the contiguous primitive area is presently underway. Until this study is complete about 45,300 acres will be managed to protect wilderness characteristics. The remaining 19,300 acres will be available for a full range of resource activity. Where developmental activities occur effects would be irreversible and irretrievable. Developmental activities are scheduled on about 12,000 acres.

The level of development would not preclude further consideration of this area for wilderness during the next major Forest Plan revision.

*This alternative is comparable to Alternative S of the Beaverhead National Forest.

CONCISE MANAGEMENT PRESCRIPTIONS GROUPED BY MANAGEMENT EMPHASES

(These prescriptions are grouped to facilitate the discussion of environmental effects of the alternatives in Part V of the previous Roadless Area discussions.)

1.Designation: Wilderness, Recommended Wilderness and Further Planning
Management Emphasis: Wilderness

INCLUDES-- Rx 2-2,3-3,37-43

2.Designation: Nonwilderness
Management Emphases: Timber (Retention/Partial Retention and Modification/Maximum Modification)

INCLUDES--Rxs10-15,10-17,10-18,10-13,9-12,9-14,14-14,12-22,20-29,23-32,30-20,30-16,30-19,17-26,5-5,6-6,33-7,15-24,24-33,32-34,31-14,19-28,11-21,26-35,28-39 and the NRT Rx.

3.Designation: Nonwilderness
Management Emphases: Range (No Timber, High Intensity Range and Low Intensity Wildlife)

INCLUDES--16-25

4.Designation: Nonwilderness
Management Emphases: Primitive and Semi-Primitive Recreation/Custodial

INCLUDES--8-9,8-11,8-44,1-1,34-40,35-41,36-42,39-45,40-46,41-47,42-48,43,49

5.Designation: Nonwilderness
Management Emphases: High Intensity Range and High Intensity Wildlife, Moderate and Low Intensity Range, Wildlife, and Riparian. (No Timber)

INCLUDES--18-13,18-27,8-10,4-4,21-30,25-14,26-36,38-35,28-38, and 25-32.

CONCISE PRESCRIPTIONS

The following prescriptions were used to formulate alternatives for the Beaverhead National Forest. These concise prescriptions are for display only.1/

Custodial Management (MA No. 1)

1-1 MINLVL-MINLVL 2/

Custodial management to protect existing improvements and resources.

Recreation Mgmt. Type 1 (MA No. 1)

8-11 RC-1

Management emphasis is on providing recreation opportunities in a natural, unmodified setting. VQO Retention/Partial Retention.

Wildlife (Threatened and Endangered Species) (MA No. 1)

Manage the habitats of any threatened or endangered species to ensure that essential or critical habitat is protected from degradation by other resource uses. Consider grizzly bear, wolf, peregrine falcon, and bald eagle habitat needs in management practices adjacent to identified essential habitat and when seasonal or transient occupancy is anticipated.

Administrative Sites (MA No. 2)

Manage administrative sites as necessary for the admnistration of Beaverhead National Forest lands.

Archaeology (MA No. 3)

Management emphasis is on the preservation of archaeological, paleantological, and historical sites and their contiguous surroundings for their cultural and scientific value.

Research Natural Areas (MA No. 6)

Manage research natural areas (RNA) with non-manipulation research.

1/ These prescriptions, in detailed form, are available for review in the Forest Supervisor's Office, Dillon, Montana.

2/ This line gives the management emphasis and intensity code (1-1, 8-11...) and the prescription abbreviations (MINLVL-MINVL, RC-1...) for the FORPLAN Report Writer computer runs.

Recreation, Type V (MA No. 7)

Management emphasis is on providing recreational opportunities for Forest visitors in moderately to highly developed areas.

Special Recreation Areas (MA Nos. 8 and 30)

35-41 WP-RA
36-42 WBH-RA
43-49 Tobrt-Tobrt
39-45 Minneopa-Minneopa
40-46 Garfield-Garfield
41-47 It Peaks-It Peaks
42-48 Gravelly-Gravelly

The management emphasis for these areas is to promote a variety of primitive, and semi-primitive motorized and nonmotorized recreation opportunities, using the site specific recreation opportunities and other resource values and uses in an area (such as wildlife, fisheries, range forage, minerals, and so on) to guide the determination of specific opportunities provided by that area. Provide for maintenance of high quality wildlife and fisheries habitat, water quality and visual quality, enhancing those resource values where compatible with recreation management objectives. Provide for maintenance of current uses including livestock grazing, mineral exploration and development, unregulated harvest of posts, poles, and salvage material, and firewood cutting where compatible with recreation resource management objectives. In the Garfield Mountain, Morrison Lake, and Snowcrest areas, maintain a domestic livestock grazing program that recognizes the high value of the range forage through intensive management while providing recreation opportunities.

Wilderness Management (MA No. 9)

2-2 WILDER-WILDER

Management emphasis is on managing classified wilderness in accordance with the Wilderness Act of 1964. Management intensity will be low to high. VQO of Preservation.

Wildereness Study Area (MA No. 9)

3-3 WSA-WSA

Management emphasis is on the protection and enhancement of wilderness characteristics of all Proposed Wilderness and Further Planning Areas until a final wilderness classification determination is made. Management will mitigate and resolve incompatible uses. VQO of Preservation.

Storm Lake Recommended Wilderness (MA No. 9)

Management emphasis is on the protection and enhancement of wilderness characteristics of all Proposed Wilderness and Further Planning Areas until a final wilderness classification determination is made. Management will mitigate and resolve incompatible uses. VQO of Preservation.

Riparian (MA No. 13)

28-39 RIP ENHCMT

Management emphasis is on enhancement of riparian areas by implementing management practices to improve wildlife/fish/fish habitat and/or to maintain favorable water flows. VQO Retention/Partial Retention.

Riparian (MA No. 14)

28-38 RIP RET

Management emphasis is on protecting and maintaining riparian areas by eliminating or controlling activities that lower existing quality and quantity of water and/or wildlife and fish habitat. VQO Retention/Partial Retention.

Wildlife (H) - Riparian (L) (MA No. 14)

22-31 W-RIP H-L

Management emphasis is on resource management to enchance big game and maintain watershed conditions in absence of livestock grazing. VQO Retention/Partial Retention.

Watershed (MA No. 14)

27-38 WATER-RET

Management emphasis is on retention of watersheds (principally municipal watersheds) to provide and maintain water in the quality and quantity that is presently being produced. VQO Retention/Partial Retention.

Timber (L) (MA No. 15)

30-20 T-R/PR L

Emphasize timber production with high intensity capital investment meeting VQO of Retention/Partial Retention.

Timber (H) (MA No. 15)

30-16 T-R/PR H

Emphasize timber production with high intensity capital investment meeting VQO of Retention/Partial Retention.

Timber (M) (MA No. 15)

30-19 T/R/PR M

Management emphasis is on timber production with moderate intensity capital investment, meeting VQO of Retention/Partial Retention.

Timber (H) (MA No. 16)

10-15 T-M/MM H

Emphasize timber production with high intensity capital investment meeting VQO Modification to Maximum Modification.

Timber (M) (MA No. 16)

10-17 T-M/MM M

Management emphasis is on timber production with moderate investment, meeting VQO Modification through Maximum Modification.

Timber (L) (MA No. 16)

10-18 T-M/MM L

Emphasize timber management with low intensity capital investment, meeting VQO Modification through Maximum Modification.

Timber (M) (MA No. 16)

10-13 T-M/MM M

Management emphasis is on moderate intensity timber management with additional emphasis on moderate range management. VQO Modification/Maximum Modification.

Timber (M) - Range (M) (MA No. 17

9-14 T-R H-M

Emphasize timber production with high intensity capital investment with the application of grazing management systems that obtain proper utilization of available forage. Meet VQO's of Modification to Maximum Modification.

Range (H) - Timber (M) (MA No. 17)

14-14 R-T H-M

Management emphasis is on high intensity range management while allowing moderate intensity timber management. VQO Modification/Maximum Modification.

Timber (M) - Rec. (Type III) - Range (M) (MA No. 18)

12-22 T-RC-R M-3-M

Management emphasis is on moderate intensity timber, recreation, and range management. VQO Modification/Maximum Modification.

Range (H) - Timber (M) - Rec. (Type III) (MA No. 18)

17-26 R-T-RC H-M-3

Management emphasis is on high intensity range management while allowing moderate level recreation and moderate timber management. VQO Retention/Partial Retention.

Rec. (Type III) - Timber (L) (MA No. 18)

5-5 RC-T 3-L

Management emphasis is on providing recreational opportunities in lightly developed areas while allowing low intensity timber practices. VQO Retention/Partial Retention.

Recreation (M) - Range (M) - Timber (L) (MA No. 18)

6-6 RC-R-T M-L-L

Management emphasis is on providing recreational opportunities to semi-primitive areas while allowing moderate intensity range and low intensity timber management. VQO Retention/Partial Retention.

Rec. (Type III) - Range (M) - Timber (M) (MA No. 18)

33-7 RC-R-T 3-M-M

Management emphasis is on providing recreational opportunities in lightly developed areas while providing moderate range and moderate intensity timber management. VQO Retention/Partial Retention.

Range (H) - Wildlife (L) - Timber (L) (MA No. 19)

15-24 R-W-T H-L-L

Management emphasis is on intensive range management while retaining suitable wildlife habitat primarily for big game species and allowing low intenstiy (Uneven-age) timber management. VQO Retention/Partial Retention.

Wildlife (H) - Timber (L) - Range(H) (MA No. 19)

20-29 W-T-R H-L-H

Management emphasis is on enhancement of big game wildlife habitat while allowing high intensity range management and low intensity uneven-age timber management. VQO Modification/Maximum Modification.

Wildlife (H) - Range (H) - Timber (L) - (Wildlife Summer Range) (MA No. 19)

24-33 W-R-T H-H-L

Manage these wildlife and range areas to provide the habitat components necessary to sustain reasonable populations to all wildlife species. Special attention is to be given to special areas needed by wildlife, i.e., reproduction areas, strutting grounds, etc. Management emphasis on intensive range management to utilize the available forage after initially upgrading range condition, if necessary, through cultural practices. Emphasize timber production with low capital investment. VQO Retention/Partial Retention.

Wildlife (H) - Range (M) - Timber (M) (Elk, Mule Deer Summer Range) (MA No. 20)

32-34 W-R-T H-M-M

Manage elk/mule deer summer range to provide the habitat components necessary to sustain reasonable populations of elk and mule deer. Special emphasis is to be given to forage/cover ratios. Also, emphasize moderate intensity range management along with timber production with moderate intensity capital investment. VQO Retention/Partial Retention.

Wildlife (H) - Timber (M) (Elk, Mule Deer Summer Range) (MA No. 21)

31-14 W-T H-M

Manage elk/mule deer summer range to provide the habitat components necessary to sustain reasonable populations of elk and mule deer. Special emphasis is to be given to forage/cover ratios. Also, emphasize timber production with moderate intensity capital investment. VQO Retention/Partial Retention.

Wildlife (H) - REc. (M) - Timber (L) (MA No. 21)

19-28 W-RC-T H-M-L

Management emphasis is on enhancement of big game wildlife habitat while also emphasizing recreational opportunities in semi-primitive areas and allowing low intensity timber management to obtain sustained yield while maintaining a continuous forest canopy by selective system of cutting (uneven-age management). All big game species, habitats and seasonal ranges are covered under this prescription. VQO Retention/Partial Retention.

Wildlife (H) - Timber (M) (Elk, Mule Deer Summer Range) (MA No. 21)

23-32 W-T H-M

Manage elk/mule deer range to provide the habitat components necessary to sustain reasonable populations of elk and mule deer. Special emphasis is to be given to forage/cover ratios. Also, emphasize timber production with high intensity capital investment. VQO Modification/Maximum Modification.

Timber (L) - Rec. (Type III) - Wildlife (L) (MA No. 21)

11-21 T-RC-R L-3-L

Management emphasis is on low intensity uneven-age timber management. Management for retention of wildlife habitat and semi-primitive recreation are compatible practices within this prescription. VQO Retention/Partial Retention.

Recreation (Type II) (MA No. 22)

8-9 RC-2

Management emphasis is on providing and preserving semi-primitive recreational opportunities. This may or may not include motorized use. VQO Retention/Partial Retention.

Recreation (Type III) (MA No. 22)

8-10 RC-3

Management emphasis is on providing roaded natural recreational opportunities for Forest visitors in lightly to moderately developed areas. VQO Retention/Partial Retention.

Recreation (Type III and IV) (MA No. 22)

8-44

Management emphasis is on providing recreational opportunities in developed campgrounds.

Range (H) - Wildlife (L) - Recreation (L) (MA No. 22)

15-24 R-W-RC H-L-L

Management emphasis is on high intensity range management while providing for retention of suitable wildlife habitat primarily for big game species and for recreational opportunities in primitive areas. VQO Retention/Partial Retention.

Range (H) - Wildlife (L) - Semi-Primitive Rec. (MA No. 22)

16-25 R-W-RC H-L-2

Management emphasis is on high intensity range management while retaining suitable wildlife habitat primarily for big game species and providing recreational opportunities in semi-primitive areas. VQO Retention/Partial Retention.

Range (M) (MA No. 23)

18-13 R-M

Management emphasis is on moderate intensity range management through application of management systems that seek to obtain proper utilization of available forage. VQO Retention/Partial Retention.

Range (L) MA No. 23)

18-27 R-L

Management emphasis is on low intensity range management through simple management systems which will maintain existing plant vigor. VQO Retention/Partial Retention.

Rec. (Type III - Range (M) (MA No. 23)

4-4 RC-R 3-M

Management emphasis is on providing recreational opportunities in lightly developed areas and on moderate range management. VQO Retention/Partial Retention.

Wildlife (L) - Range (M) (MA No. 24)

21-30 W-R L-M

Management emphasis is on maintaining and providing suitable wildlife habitat primarily for big game species while also emphasizing moderate intensity range management and management of fisheries to maintain, improve and/or rehabilitate lake and stream habitat for the production of game fish. All habitats, big game species and seasonal ranges are covered under this prescription. VQO Retention/Partial Retention.

Wildlife (H) - Range (M) (Big Game Range (MA No. 24)

25-14 W-R H-M

Manage big game range to provide the habitat components necessary to sustain reasonable populations. Special attention is to be given to forage production and thermal cover. Apply moderate range management through management systems that seek to obtain proper utilization of available forage, VQO Retention/Partial Retention.

Wildlife (H) - Range (H) (MA No. 24)

25-32 W-R H-H

Manage wildlife and range areas to provide the habitat components necesary to sustain reasonable populations of all wildlife species. Special attention is to be given to forage production and thermal cover. Management emphasis is also on intensive range management to utilize the available forage after initially upgrading range condition, if necessary, through cultural practices. VQO Retention/Partial Retention.

Wildlife Winter Range (MA No. 25)

26-36 W-WINTER

Manage elk/mule deer winter range to provide the habitat components necessary to sustain reasonable populations of elk and mule deer. Special attention is to be given to forage production and thermal cover. VQO Retention/Partial Retention.

Wildlife (MA No. 25)

38-35 W-SUMMER NONTIMBER

Manage key big game summer range to provide the habitat components necessary to sustain reasonable populations of elk, mountain goat, bighorn sheep, and/or mule deer. VQO Retention/Partial Retention.

Wildlife (MA No. 26)

26-35 W-SUMMER

Manage key big game summer range to provide the habitat components necessary to sustain reasonable populations of elk, mountain goat, bighorn sheep, and/or mule deer. Special emphasis is to be given to forage/cover ratios. VQO Retention.

Watershed (MA No. 27)

27-37 WATER-REHAB

Management emphasis is on rehabilitation of degraded watersheds which ae producing excessive amounts of sediment. VQO Retention/Partial Retention.

Recreation (Type IV) (MA No. 28)

13-23 R-4

Provide for a variety of recreation activity in the Grasshopper Area to coincide with present public and private developments. This includes downhill skiing, cross-country skiing, camping, hiking, snowmobiling and horseback riding.

National Recreation Trail Mgmt. (MA No. 29)

Management emphasis is on protecting NRT corridor physically and visually while allowing low intensity timber, moderate intensity range and high intensity wildlife management.

Recreation (Type IV) (MA No. 7)

Campgrounds management emphasis is on providing recreation opportunities for the Forest visitors, orientations towards developed areas for social interactions with other people that are easy to access with conventional motor vehicles. VQO Retention.

The whole set of prescriptions complete with management practices, standards and guidelines are included in the Planning Records, Beaverhead National Forest Supervisor's Office, Dillon, Montana.

*GPO 692-017 (1986)